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A Military Personnel Price Index

(Supplement to RAC-TP-289)



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(Supplement to RAC-TP-289)

by
Robert L. Winstone



RESEARCH ANALYSIS CORPORATION

MCLEAN, VIRGINIA

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FOREWORD

This publication is a supplement to RAC-TP-289, "Military Price Index: Preliminary Presentation," which produced a price index useful for deflating to constant dollars the purchases of goods and services by the Department of Defense. In this supplement the price index for military personnel was improved over that in the earlier publication by the greater use of military-personnel budget obligation data for various categories of military-personnel costs. This reduced the necessity of using borrowed civilian wholesale and consumer price indexes to represent the price changes in the military context and thereby resulted in greater accuracy.

This supplement is a first step in the improvement of the overall index developed in RAC-TP-289.

Arnold Proschan
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A Military Personnel Price Index

(Supplement to RAC-TP-289)

ABBREVIATIONS

DOD	Department of Defense
O&M	operation and maintenance, Army
Os	overseas
RDTE	research, development, test, and evaluation
ZI	zone of interior

ABSTRACT

The RAC publication, "Military Price Index: a Preliminary Presentation," RAC-TP-289, was an attempt to produce in some detail a price index that would be useful for deflating to constant dollars the purchases of goods and services by the Department of Defense (DOD). As the aggregate index was being developed, it became apparent that the assumption of the adequacy of certain specific wholesale and consumer price indexes as deflators of given military expenditures must be tested; this did not mean that the developmental work of the index was useless; it merely meant that the index might be improved or that more confidence could be placed in it if the data samples were from military rather than civilian sources.

This supplement of a price index for military personnel is the first step in an overall improvement, and in fact it tested the adequacy of using borrowed civilian-type indexes in the military-personnel context. The index developed for the price changes in the "Military-personnel budget" category showed an increase about 12 percent faster than the military-personnel sub-index computed for RAC-TP-289. From 1962 to 1967 the price increase shown was 23.2 percent compared with the 20.8 percent increase given in RAC-TP-289.

When the new Military Personnel Index was used to deflate military-personnel expenditures the change in the aggregate military price index was less significant even though military personnel make up approximately 30 percent of the DOD budget.

INTRODUCTION

This paper is an attempt to improve a portion of the general price index of military goods and services developed in "Military Price Index: a Preliminary Presentation," RAC-TP-289.¹

A price index combines the prices of many different commodities or services into one summary number that will reflect the price change from time to time or from place to place according to the use to which the index is to be put. The developer of an index must seek ways to determine the unit prices of items to be included and to establish the importance of each price in the overall average. Further, he must make decisions based on the trade-offs between approaching more closely the "completely accurate price change," including in his representation of price changes as many of the transactions as possible over the time period and against the growing costs of each expansion of coverage. In this paper improved accuracy is being obtained by incorporating estimates of prices derived from military-personnel budget obligations in place of using borrowed civilian wholesale and consumer price indexes to represent the price changes in the military context. Military-personnel expenditures consist of reimbursements to individuals retired from or in the active or reserve forces of the US.

In RAC-TP-289 a number of assumptions were used that are not used here. There the average of basic pay to the number of individuals by grade in the active forces became the price estimate for basic pay; the aggregate price change obtained by using these prices was applied to the following military-personnel elements: incentive pay, special pay, proficiency pay, reenlistment bonuses, severance pay, and employers' contribution to social security taxes. Because the same detail was not available in the published data for the reserve forces, the total outlay of these funds was allocated in the same proportion as that observed in the active forces. The rest of the subindex used selected civilian indexes that were applied as price changes to the following military-personnel elements: quarters allowances, subsistence allowances, uniforms and clothing gratuities, transportation payments, and supplies and materials. Finally the payments to retired persons in obligations terms were reduced to a per capita basis by grade, and these prices were used to develop a subindex for retired persons.

The improved approach uses available data on military obligations per capita as the estimate of prices to produce subindexes for each of the previously imputed or borrowed indexes.

The new aggregate military-personnel price index is considerably different from the corresponding subindex developed in RAC-TP-289. For the period

1962-1967 military-personnel prices have been shown to increase 11 percent faster with the new index than with the one developed in RAC-TP-289, i.e., an increase from 100.0 to 123.2, or 23.2 percent, using the extended-data computations, compared with an increase of only 20.8 percent for the same time period using the index of RAC-TP-289. Table 1 shows the individual indexes

TABLE 1
Indexes Developed for the Aggregate Military-Personnel Price Index Including
Comparison with the Aggregate Indexes of RAC-TP-289

Index items	FY62	FY63	FY64	FY65	FY66	FY67	FY68 (estimated) ^a
Base pay							
Officers	100.3	100.0	111.6	118.0	126.2	131.4	130.0
Enlisted	100.0	100.0	108.1	114.6	124.8	129.1	129.2
Officer incentive	100.1	100.0	98.2	97.5	97.6	96.9	96.9
Enlisted incentive	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Officer special	99.6	100.0	100.1	108.9	109.4	110.3	110.1
Enlisted special	100.0	100.0	100.0	100.0	104.0	106.9	107.1
Proficiency	100.0	100.0	111.3	119.0	119.5	119.6	119.5
Reenlistment	100.6	100.0	108.1	114.6	124.8	129.1	129.2
Officer quarters	95.0	100.0	127.2	127.5	126.1	124.7	131.4
Enlisted quarters	100.0	100.0	119.0	118.3	118.7	118.8	118.8
Officer subsistence	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Uniforms and clothing	99.4	100.0	102.1	101.5	102.6	128.9	151.2
Family separation	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Severance	100.0	100.0	106.0	114.5	121.8	126.9	126.8
Social security	93.2	100.0	114.4	119.6	139.3	166.5	170.4
Enlisted subsistence	101.4	100.0	99.7	101.2	104.2	114.5	117.0
Permanent change of station	100.0	100.0	99.3	99.9	102.2	107.4	107.2
Reserve-forces pay	100.1	100.0	108.9	113.1	120.5	126.8	127.5
Retired payments	100.7	100.0	107.2	107.8	113.8	117.6	119.1
Aggregate military-personnel index	100.1	100.0	108.1	112.1	118.1	123.2	123.8
Military-personnel subindex from TP-289	100.0	100.0	106.4	110.1	117.6	120.8	— ^b
Military purchases adjusted for new subindex	98.8	100.0	103.3	106.4	110.0	112.5	—
Military purchases index from TP-289	98.9	100.0	102.9	105.7	109.8	112.1	— ^b

^aThe 1968 index computed in this paper suffers from the fact that estimates in the FY68 budget, i.e., for the January 1967 budget message, use the same partial FY67 implementation to produce FY67 and FY68 estimates. There are, therefore, only minor differences between the two estimates, and the 1968 index turns out to be almost identical with that of 1967, although other estimating techniques for FY68 might result in higher prices.

^bNo index was computed for FY68 in RAC-TP-289 because of the dangers of extrapolating civilian indexes 2 years in advance of actual occurrence.

developed for military personnel, the aggregate military-personnel price index, and the corresponding RAC-TP-289 subindex. In addition an adjusted index for all military goods and services incorporating the new military-personnel index as a subindex is compared with the aggregate price index for all military goods and services in RAC-TP-289.

The results in Table 1 further indicate that a 4-year annual compounded growth rate for the base period FY63-FY67 varies by more than 11 percent; the annual growth in military-personnel prices shown in RAC-TP-289 is 4.84

percent compared with a 5.36 percent annual growth rate developed in this paper.

The military-personnel subindex of RAC-TP-289 gave excessive weight to basic pay, making this component of the aggregate index rise too rapidly. However, the fact that the new index rose more than the one in RAC-TP-289 suggests that the civilian indexes produced a more-than-compensating downward bias. It must be concluded, therefore, that in this case the borrowed indexes were not very good indicators of the price changes for the allowance elements of military-personnel costs.

MILITARY-PERSONNEL PRICE-INDEX USES, PRICE COMPUTATIONS, AND SOURCES

POSSIBLE MILITARY-PERSONNEL PRICE-INDEX USES

It is possible with the military-personnel price index to compare compensation increases that have taken place not only within the military, as between ranks, but also between military and civilian compensation. For example, the compensation for civilian employees of the Federal government increased by 13.5 percent, 1963-1967,¹ whereas the military-personnel price index increased by 23.2 percent over the same time period. It must be remembered, however, that the comparisons are of percentage changes, not of absolute levels. The index might easily improve the process of manpower planning and management since the availability of an accurate price index would give the planner-decision maker a "real-dollar" historical analytical tool that might aid him in optimizing or improving the grade and rank distributions in the military services as well as permit a more precise evaluation of the Department of Defense (DOD) impact on the national labor market.

TABLE 2
Percentage Breakdown of the DOD Budget for FY67

Category	Percent of total
Military personnel	29.3
Procurement	26.7
Operation and maintenance (O&M)	18.9
Civilian personnel	12.3
Research, development, test, and evaluation (RDTE)	8.7
Military construction	2.7
Military assistance	1.4
Total	100.0

Published official US price indexes are constructed from the prices of sampled items obtained in the nongovernmental sectors of the economy, and consequently they answer questions about price changes in those sectors. There remains a large area, the governmental sector, for which price changes have never been and are not now measured directly.

Some of the poorest indexes detailing the price changes of Federal purchases of goods and services are at present used to deflate the national-income

and product accounts to produce the constant-dollar values. Military-personnel payments are an important segment of total DOD expenditures, and consequently of Federal purchases of goods and services as well. Almost 30 percent of the DOD budget is military-personnel compensation. Table 2 gives the percentage breakdown of the DOD budget for FY67 by adjusted budget categories from RAC-TP-289.

A military-personnel index will narrow the area for which the agency responsible for making the constant-dollar national-accounts estimates, the Office of Business Economics, has no adequate index.

MEANING AND SIGNIFICANCE OF PAASCHE'S INDEX

The uses to which a price index may be put will in part determine its construction. When the primary purpose is to deflate a series of expenditures to a constant-dollar series, only an index that is a ratio between the value of the current quantities at current prices and at base-year prices will provide an algebraically correct deflator of current values to what they would have been at base-year prices; this is the so-called "Paasche's index," which uses given-year weights.* It is the index formula used in all the computations in this paper except for an alternate example using base-year quantities to compare basic-pay changes.

The two kinds of indexes may be illustrated by an example making use of the cash-register checkers at a supermarket. If a single basket of goods were to be run by the supermarket cash-register checker in several different years, the cash-register totals on the tapes would be different only because of the yearly price changes. Division of each total by the total obtained in the base year would yield a base-year weighted-price index (Laspeyres' index). Paasche's index uses a new basket of goods each year. Each current basket is priced and totaled by the checker twice, once at current-year prices and again at base-year prices. The comparison between any given year and the base year is still on the total value of an unchanged basket of goods, but for each given year there is a different basket of goods for which the value comparison with the base year is made. The basket used in the comparison is always the most recent one.

Three conditions are necessary for Paasche's and Laspeyres' indexes to be different: (1) there must be a change in the relative quantities between the two periods, (2) the price changes must not be the same for all component items in the indexes, and (3) the correlation between the price change and the quantity change must not be zero. The amount of the difference between the two indexes depends on the interactions of departures from these three conditions. The basic-pay index was computed using both formulas and it is apparent from the basic-pay summary table (presented later as Table 6) that the two formulas produce very similar results in this circumstance.

*Paasche's index_n = $P_n Q_n / P_0 Q_n$, where P and Q are price and quantity, and the subscripts n and o refer to the current and base years respectively.

PRICES SUITABLE FOR USE IN INDEXES

Accuracy of the index suggests the desirability of using very detailed classes of transactions for price-data inputs to the index. Extensions of detail, however, are not only expensive but also impractical, in principle, if the detail implies that the classes existing in the base period are not the same as those existing in later periods.

A general per capita average might mix different "specifications" for payment, for example, distance traveled, length of service, mixture of grade structure, or size of family. When attributes such as these are an important part of the computation schedule, the calculated price changes can be affected not only by the change in the "specified" prices but also by changes in the mix of the types of personnel included in the class. The Bureau of Labor Statistics solves this problem by defining price changes in terms of the movements of quoted prices of a sample of detailed specifications of items in a commodity class. It assumes that an index calculated from a sample of specifications that are unchanged over time will be representative of some average price change for the innumerable other specifications that are not sampled and may not persist in all periods of the index.

In the present paper there is no sampling. A price is defined as total compensation for a certain class divided by the number of people in the class. Individual classes are made as narrow as practical, but they are still broad enough to permit some effects of changing specification mix within classes to affect the index computation.

The significance of these specification changes depends in part on whether the index measures the cost of services from the viewpoint of a government employing the service or measures the attractiveness of military service from the viewpoint of the individual. For example, an increase in the average number of dependents might increase the costs per unit of personal service and should in principle cause a rise in an index of such costs. However, it might not represent any increase in allowance rates from the viewpoint of the military personnel. The present index is primarily an index of cost to the government.

SOURCES OF MILITARY DATA

The most useful source of data has been the Military Personnel Hearings before a Subcommittee of the Committee on Appropriations, House of Representatives, published annually.²⁻⁸ The hearings were supplemented by the Justification of Estimates for the Fiscal Years submitted by each of the services. Some of the Justification documents are difficult to acquire, and recently have been marked "For Official Use Only." The data containing this restriction were omitted from the calculations; per capita prices of the unrestricted values alone were used.

Certain of the per capita values remained unchanged over the entire 7-year period covered by the index in its present form. These unchanged values were input to the computations at the same level for the current outlays and the outlays in constant FY63 dollars. It should not be expected that the per

capita values will remain constant forever; they should be checked for each year for which the index is to be extended.

One final comment on the data is necessary. The Hearings as well as the Justification documents published early in the calendar year give obligation estimates for the remainder of the fiscal year and forecast the obligations for the next fiscal year. Expenditures in the same detail are never published. The forecasted obligations are often used here as actual expenditures; some improvements in accuracy would be possible if actual expenditures were made available.

THE INDEX IN DETAIL

Military-personnel expenditures⁹ consist of compensation to (a) the active forces, (b) the reserve forces, and (c) individuals retired from the armed forces of the US. Table 3 shows these elements by year.¹⁰ It also shows the percentage of the total expenditures going to the active forces. As might be expected, the active forces dominate military-personnel costs, since in each year the compensation of the active forces amounts to 86 percent or more of total military-personnel costs. This proportion seems to change in the same direction as the size of the armed forces changes.

TABLE 3
**Military-Personnel Expenditures:⁹ Compensation to Active Forces,
 Reserve Forces, and Retired Personnel, by Fiscal Year**
 (in millions of dollars)

Year	Total	Active forces		Reserve forces	Retired persons
		Amount	Percent of total		
FY62	13,032	11,530	88.5	607	894
FY63	13,000	11,386	87.6	599	1015
FY64	14,195	12,312	86.7	674	1209
FY65	14,771	12,638	85.7	634	1399
FY66	16,753	14,407	86.0	755	1591
FY67 ¹⁰	19,787	17,054	86.2	902	1830
FY68 ^a	21,823	18,903	86.6	910	2010

^aEstimated.

The value data for the index as given in Table 4 are generally actual obligations; however, for certain items in FY67, FY68, and other fiscal years the budget estimates of detailed obligations, not the actual obligations, are used. No attempt was made to obtain expenditure data since, in the case of military personnel, expenditures and obligations are necessarily nearly identical.

TABLE 4
Breakdown of Active-Forces Pay, Allowances, and Other Programs, 1962-1968²⁻⁸
(in millions of current dollars)

Expenditures	1962	1963	1964	1965	1966	1967	1968
Pay							
Basic							
Officers	1,989	1,983	2,240	2,408	2,573	2,846	3,017
Enlisted personnel	4,797	4,706	5,114	5,325	6,087	7,488	7,954
Incentive							
Officers	261	263	263	264	265	266	280
Enlisted personnel	77	82	89	95	106	112	118
Special							
Officers	33	33	40	43	60	80	80
Enlisted personnel	134	135	92	97	268	448	528
Proficiency	89	109	112	123	124	134	148
Reenlistment	125	117	135	147	165	212	261
Severance							
Officers	45	54	54	57	57	69	75
Enlisted personnel	147	153	175	189	210	218	269
Social security taxes	199	210	243	251	307	419	454
Allowances							
Quarters							
Officers	274	276	298	303	306	338	364
Enlisted personnel	1,054	1,064	1,141	1,094	1,091	1,191	1,298
Officer subsistence	191	192	192	195	196	205	228
Uniforms and clothing	260	228	250	228	323	392	468
Family separation^a							
Officers	21	--	8	11	18	24	28
Enlisted personnel	32	--	29	39	70	153	161
Other pay and allowances							
Cadets	21	20	20	19	25	28	28
Station allowances overseas							
Officers	15	17	17	19	27	43	47
Enlisted personnel	34	35	35	40	53	79	83
Other programs							
Enlisted subsistence	958	920	906	898	1,012	1,392	1,457
Permanent change of station	775	825	824	841	1,182	1,389	1,524
Other military costs	15	11	11	11	27	106	151
Reimbursable payments	254	250	240	152	105	191	223
Total obligations	11,800	11,683	12,528	12,849	14,657	17,827	19,253

^a1962 figure is a housing allowance.

COMPENSATION FOR ACTIVE FORCES

The broad segments of active-forces compensation with available detailed obligation breakdowns are pay, allowances, and other programs. The sum of the obligations in Table 4 are only slightly different from the expenditures shown for the active forces in Table 3.

For each item in Table 4 a single aggregate price subindex has been developed except for pay and allowances for cadets, station allowances overseas, other military costs, and reimbursable payments. The total of these four items has never been larger than 3 percent of the total military-personnel obligations.

for the years under consideration. They will be omitted and their prices assumed to change as the aggregate military-personnel index changes. The pay and allowances for cadets is small and moves as the overall military-personnel compensation moves. The prices of the reimbursable items also move as military-personnel expenditures do, since they are generally for the same items that are included in the obligations figures.

No index has been developed for station allowances overseas, because there is insufficient detail in the data.²⁻⁸ An average price in one year might be considerably different from that in another year not because of any change in ways of calculating allowances anywhere but merely because of a change in the relative size of overseas stations having different ways of calculating allowances. A change in the relative strength of each grade or rank of personnel could also affect the apparent change in the price of overseas allowances. For other military costs, the changes in quantities and prices were not apparent; therefore no index was developed for this element either. When the total outlays for military personnel including station allowances overseas and other military costs are deflated by the aggregate military-personnel price index, the implicit assumption is that the price of these elements has changed as the price index has changed. As each of the following index computations is discussed, some of the caveats that should be kept in mind are indicated.

Pay

Within the active forces there are seven distinct kinds of pay reflecting a wide variety of compensation forms and criteria. The leading one, basic pay, amounts to more than one-half of all military pay (see Table 4).

Basic Pay. The basic-pay index was derived from estimates of compensation by rank or grade and from data showing the number in each rank or grade. Adjustment and modification of the published data were necessary to obtain appropriate pay rates necessary for index purposes.* Total basic pay and the number of man-years by rank for each of the military services were organized and collated to obtain an aggregate DOD table of basic pay and number of man-years by rank for each year. Thereafter a number of operations were performed: (a) total obligations (roughly outlays) for each rank were adjusted to a per capita pay rate by dividing the total obligations for each rank by the number of man-years in each rank; (b) per capita pay rates by rank for each year were divided by the base-year rate to produce pay-rate relatives; (c) these pay-rate relatives were used to deflate the corresponding current outlays, in other words to adjust total outlays of current man-years by rank or grade to base-year prices; and (d) these two sets of outlays (current and deflated)

*Estimates of obligations appear with the rank breakdown in the congressional hearings.² Even though the FY63 hearings had the actual obligations figure, there were no rank breakdowns. The estimates selected for FY62 were found in the FY63 budget hearings. Service totals had to be aggregated since no composite DOD totals were shown in these documents. In spite of the fact that pay rates are the same for equivalent ranks, the average pay per man-year in each rank often differed for the separate services owing to differences in mix of longevity. No adjustment was made for productivity changes, first, because it is difficult to measure productivity changes in the military context and, second, because the job definitions of the duties of a particular rank would imply that productivity improvements are rewarded by advancements.¹¹

were summed across ranks and grades and the ratio between the two sums yielded a Paasche's index.

To illustrate this process more concretely, it may be useful to perform the computations making use of actual data (see Table 5). For this purpose Army basic-pay rates are used for the derivation of a 1966 index with 1963 as

TABLE 5
Given-Year-Weighted Index for Army Basic-Pay Rates^{1,6}

Rank	Total outlay for FY66, thous of dollars (1)	Average man-years in FY66 (2)	Rate ^a per man-year in FY66, dollars (3)	Rate ^a per man-year in FY63, dollars (4)	Price relative (1963 = 100) (5)	Total outlay for FY66 quantities in FY63 prices, thous of dollars (6)
Officers						
GA	13	1	12,917	12,917	100.0	13
CJCS	26	1	25,441	22,500	113.1	23
CoJS	25	1	25,441	22,500	113.1	22
O-10	253	11	23,054	20,400	113.0	224
O-9	854	42	20,341	18,000	113.0	756
O-8	3,430	187	18,340	16,200	113.2	3,030
O-7	3,843	241	15,951	14,100	113.1	3,399
O-6	69,207	5,137	13,470	11,285	119.4	57,963
O-5	142,881	12,678	11,270	9,032	124.8	114,488
O-4	160,985	17,594	9,150	7,424	123.2	130,670
O-3	234,982	31,673	7,419	5,872	126.3	186,051
O-2	76,913	14,625	5,259	4,220	124.6	61,728
O-1	79,210	22,340	3,547	2,926	121.2	65,880
WO-4	9,578	1,149	8,336	6,558	127.1	7,536
WO-3	18,701	2,699	6,929	5,609	123.5	15,143
WO-2	28,166	4,857	5,790	4,732	122.5	22,992
WO-1	9,813	2,137	4,592	3,151	110.6	8,873
Enlisted men						
E-9	29,973	4,451	6,734	5,148	130.8	22,915
E-8	79,282	13,858	5,721	4,320	132.4	59,880
E-7	191,402	185,527	1,968	3,956	125.8	152,148
E-6	347,462	82,986	4,187	3,270	128.0	271,455
E-5	487,195	115,128	4,357	2,659	126.3	385,744
E-4	170,910	160,359	2,113	1,860	124.4	298,159
E-3	109,327	206,491	1,498	1,325	131.1	221,498
E-2	111,431	121,065	1,193	1,072	111.3	129,767
E-1	169,126	159,402	1,061	961	110.0	153,750
Total	2,968,019	1,017,642			2,425,405	

^aRates per capita were computed before rounding of total outlays.

the base period. First, total outlays* (col 1) in each rank were divided by the number of man-years in that rank (col 2); e.g., there were 11 generals (four stars) in man-year terms during FY66 who received a total of \$253,594 to produce a per capita rate of \$23,054 (col 3).* In the same way col 4 was derived using data for 1963.

*In this paper, price times quantity (PQ) is called "outlays" even though it is only an estimate of outlays.

The next step developed the pay-rate relative that indicated the increases in average pay over this time period for this rank (\$23,054 divided by \$20,400 equals 113.0, i.e., col 3 divided by col 4 equals col 5). Given the FY66 outlay of \$253,594 then, these 11 generals would have received \$224,420 (col 6) using 1963 per capita pay rates. This outlay figure is obtained by dividing \$253,594 (col 1) by the price relative 113.0 (col 5).*

These calculations yielded an FY66 Army total basic pay of \$2425 million at 1963 per capita rates. The actual FY66 expenditure was \$2968 million or a 22.4 percent price increase, implying a Paasche's index for 1966 of 122.4.

This treatment assumes that promotions are quality changes and that in-grade advances or longevity pay are price changes; a promotion involves a price change only to the extent that per capita pay rates are changed.* An illustration from Table 5 assumes that there were 43 lieutenant generals (O-9) during FY65 and that 1 of them was promoted to a full general. Then the number of lieutenant generals in that grade would be reduced to 42 in FY66 and their total pay would be \$854,322, the per capita rate remaining unchanged at \$20,341; the newly promoted four-star general would add \$23,054 (his new pay) to the other 10 officers in that grade to make a total outlay of \$258,594 at \$23,054 per capita.

TABLE 6
Basic-Pay Index Computed by Paasche's and
Laspeyres' Techniques
(1963 = 100)

Year	Paasche's given-year weights	Laspeyres' base-year weights
FY62	100.5	100.4
FY63	100.0	100.0
FY64	109.2	109.1
FY65	115.7	115.5
FY66	125.2	125.2
FY67	129.7	129.9
FY68	129.4	129.4

Table 6 summarizes the results of two detailed DOD-index computations for basic pay. Both use the same data and thus the pay-rate relatives are the same. Paasche's index is shown in Table 7 and Laspeyres' index in Table 8. In Table 7 the base-year values of the current quantity $P_n Q_n$, i.e., price times

* This computation was based on unrounded 1966 total outlays, whereas col 1 of Table 3 is rounded in thousands of dollars.

* An argument for the reverse position states that when an individual has been installed in a job for a time, he is a more effective employee. Increased longevity pay resulting from increased productivity should not be considered a price increase, whereas promotion involves a new job and low productivity. Support for the treatment used here is that a promotion increases productivity because it involves new duties and responsibilities; second, that a longevity pay increase continues after a promotion takes place; and, third, that longevity increases continue beyond the time when an individual reaches his maximum usefulness in his job. Therefore, longevity pay increases should be treated as price increases and promotions should not.

TABLE 7
Computation of Given-Year-Weighted Index for DOD Active-Forces Basic-Pay Rates^{a,b,c}
 (In thousands of dollars)

Rank	P ₆₃ Q ₆₂	P ₆₄ Q ₆₃	P ₆₅ Q ₆₄	P ₆₆ Q ₆₅	P ₆₇ Q ₆₆	P ₆₈ Q ₆₇	P ₆₉ Q ₆₈
(Officers)							
G-4							
68	79	79	39	39	26	26	13
65	68	68	66	70	67	67	13
62	65	65	723	678	724	741	113
0-10	1,764	1,764	1,999	2,053	1,962	2,103	134
0-9	8,294	8,294	7,984	8,279	8,049	8,637	744
0-8	9,009	9,009	8,951	9,238	8,897	9,598	2,602
0-7	166,476	159,674	166,806	160,984	168,924	161,222	9,574
0-6	306,415	304,881	315,026	376,769	325,204	385,041	10,818
0-5	624,258	626,179	614,126	615,478	614,917	490,017	240,781
0-4	588,048	596,859	604,844	604,361	791,778	729,070	189,348
0-3	271,157	268,445	245,251	273,210	259,837	309,296	481,831
0-2	118,982	118,268	147,426	147,996	147,111	150,789	368,947
0-1	17,546	17,511	19,816	22,035	21,816	26,298	512,924
0-0	28,210	28,125	29,537	32,520	27,444	32,137	649,200
W0-3	41,567	41,669	24,966	27,512	26,520	30,869	842,190
W0-2	8,123	8,164	10,611	11,464	8,666	9,212	24,479
W0-1	1,984,614	1,989,758	2,018,129	2,252,477	2,011,896	2,374,951	322,939
Subtotal	100.1	101.6	111.6	118.0	126.1	131.4	130.6
Final index							
E-9	45,106	45,397	65,218	72,806	67,645	81,309	75,283
E-8	126,512	126,279	142,375	160,741	144,937	176,243	156,100
E-7	46,271	47,131	44,062	48,295	44,0147	50,5289	475,766
E-6	726,317	720,307	744,427	834,325	748,649	881,160	754,165
E-5	1,049,143	1,061,713	1,073,006	1,028,205	1,065,116	1,265,358	1,083,737
E-4	920,401	916,321	916,043	1,010,395	916,655	1,077,070	912,082
E-3	768,8812	781,164	802,101	794,882	813,266	911,593	783,297
E-2	367,046	370,149	364,551	366,374	357,504	364,747	391,858
E-1	192,823	193,401	168,947	166,751	140,407	139,705	265,968
Subtotal	4,665,099	4,677,102	4,718,150	5,100,674	4,712,326	5,402,474	4,878,276
Index	100.5	104.1	114.6	124.8	129.1	129.2	129.7
Total	6,650,743	6,665,860	6,716,479	7,353,151	6,724,222	7,777,425	8,660,671
Index	100.5	109.2	115.7	125.2	129.7	130.7	129.4

TABLE 8
Computation of Base-Year-Weighted Index for DOD Active-Forces Basic-Pay Rates²⁻⁸
 (In thousands of dollars)

Rank	P ₆₃ Q ₆₃	P ₆₂ /P ₆₃	P ₆₂ Q ₆₃	P ₆₄ /P ₆₃	P ₆₄ Q ₆₃	P ₆₅ /P ₆₃	P ₆₅ Q ₆₃	P ₆₆ /P ₆₃	P ₆₆ Q ₆₃	P ₆₇ /P ₆₃	P ₆₇ Q ₆₃	P ₆₈ /P ₆₃	P ₆₈ Q ₆₃	
Officers														
G _A	39	1.000	3	1.000	39	1.000	39	1.000	39	1.000	39	1.000	39	1.000
CofS	68	1.000	68	1.037	71	1.067	73	1.126	77	1.176	80	1.176	80	1.176
O-10	637	0.999	636	1.035	659	1.068	680	1.126	717	1.170	745	1.170	745	1.170
O-9	1,836	1.000	1,836	1.027	1,885	1.072	1,968	1.131	2,077	1,175	2,158	1,175	2,158	1,175
O-8	8,327	1,000	8,327	1,032	8,593	1,073	8,935	1,132	9,426	1,180	9,822	1,180	9,822	1,180
O-7	9,024	1,000	9,024	1,031	9,304	1,072	9,674	1,131	10,206	1,179	10,636	1,179	10,636	1,179
O-6	164,859	0.995	164,035	1,085	178,872	1,132	186,620	1,207	198,985	1,290	212,639	1,272	209,650	1,272
O-5	336,126	0.995	334,439	1,124	377,799	1,184	397,966	1,261	423,847	1,307	439,308	1,306	438,933	1,306
O-4	422,614	1,005	424,727	1,124	475,018	1,181	499,107	1,238	523,196	1,271	537,030	1,266	534,914	1,266
O-3	598,529	1,015	607,507	1,148	687,111	1,232	737,388	1,307	782,277	1,338	800,577	1,318	786,854	1,318
O-2	238,473	0.990	236,088	1,114	265,659	1,190	283,783	1,297	309,299	1,347	321,270	1,343	320,368	1,343
O-1	141,296	0.994	140,448	1,004	141,861	1,025	144,828	1,203	169,979	1,363	192,580	1,316	186,009	1,316
W-4	18,073	0.998	18,037	1,112	20,097	1,205	21,778	1,263	22,826	1,327	23,985	1,331	24,048	1,331
W-3	30,163	0.997	30,072	1,101	33,269	1,171	35,321	1,242	37,462	1,281	38,641	1,275	38,471	1,275
W-2	34,612	1,001	34,647	1,102	38,142	1,164	40,288	1,219	42,192	1,253	43,374	1,258	43,555	1,258
W-1	8,368	1,005	8,410	1,080	9,037	1,063	8,892	1,173	9,816	1,274	10,659	1,267	19,605	1,267
Enlisted men														
F-9	60,838	1,002	60,960	1,116	67,895	1,202	73,127	1,271	77,325	1,400	85,123	1,411	85,826	1,411
F-8	144,385	0.998	144,996	1,129	163,011	1,216	175,572	1,358	196,075	1,398	201,907	1,405	202,808	1,405
F-7	434,312	1,003	435,615	1,092	474,270	1,148	498,591	1,274	553,315	1,313	570,082	1,316	571,627	1,316
F-6	732,467	1,005	736,129	1,126	824,758	1,177	862,114	1,299	951,475	1,347	979,563	1,338	980,029	1,338
F-5	1,066,652	1,012	1,068,785	1,126	1,201,050	1,188	1,267,183	1,307	1,394,114	1,320	1,407,711	1,317	1,404,520	1,317
F-4	889,279	0.996	885,722	1,103	980,875	1,175	1,014,903	1,286	1,143,613	1,284	1,144,390	1,286	1,143,846	1,286
F-3	862,452	1,016	876,251	0,991	854,690	1,094	943,522	1,132	976,296	1,267	1,092,451	1,256	1,083,039	1,256
F-2	355,214	1,009	358,471	1,005	357,050	1,026	364,511	1,134	402,881	1,182	419,827	1,187	421,815	1,187
F-1	161,113	1,003	161,596	0,987	159,018	0,995	160,307	1,125	181,252	1,146	184,633	1,148	184,957	1,148
Total	6,521,443		6,745,965		7,329,973		7,767,180		8,418,767		8,729,135		8,697,345	
Index	100.0		100.4		109.1		115.5		125.2		129.9		129.4	

quantity, are found by dividing the current-year values $P_n Q_n$ by the pay-rate relatives. In Table 8 the given-year values of the base-year quantities $P_n Q_0$ are found by multiplying the base-year values $P_0 Q_0$ by the pay-rate relatives.

Incentive Pay. The second pay element of Table 4 consists of additional pay for hazardous duty such as flying, both for the air crew and noncrew (personnel such as medics who fly but are not a part of the air crew); submarine service; military parachute jumping; high-low pressure-chamber duty; human subjects of acceleration or deceleration experiments; human exposure to thermal-stress experiments; and demolition of explosives. Computation of the incentive-pay subindex was slightly different from that of the basic-pay index just described. Congressional hearings were used and collated to obtain total DOD incentive pay and number of men by rank or grade for flying and submarine duty.* The other categories did not differentiate by rank or grade. From the FY63 flying and submarine totals, the DOD rate by rank or grade became the base-year price (P_{63}) and the number of men in each category became the quantity ($Q_{62}-Q_{68}$) in the given year. In this case the FY63 price multiplied by each year's quantity ($P_{63} Q_{64}$, for example) was the constant-dollar figure (the outlay for FY64 quantity at the FY63 price). The sum of the outlays for all the ranks in constant dollars was divided into the sum of the outlay in current dollars to produce the index. The only changed incentive-pay elements during the FY62-FY68 period were flying and submarine pay for ranks O-1 to O-4 (Army second lieutenant, first lieutenant, captain, and major or Navy ensign, lieutenant junior grade, lieutenant, and lieutenant commander, respectively). All others remained unchanged. Table 9 contains the items included in incentive pay with their FY63 rates. Since noncrew officers and enlisted personnel were paid for flying, their 1963 figures were put in the "Flying duty" column of Table 9. The others were for neither submarine nor flying duty so the 1963 rates were placed in another column, "Other incentive pay." Table 10 shows the computation of the incentive-pay index for officers. It uses a weighted average of the submarine and flying compensation for the ranks in which the pay element changed

Some variation in enlisted flying pay does exist but the variation is extremely small. It was assumed that these changes were the result of rounding. The price was assumed therefore to have remained unchanged, like all the other elements of enlisted incentive pay.

Special Pay. Special pay is the third subindex developed to be included in pay. For officers it consists of pay for physicians, dentists, and veterinarians; personal money allowances for general or flag officers; pay for being subject to hostile fire; and pay for diving duty. Enlisted personnel have the latter two elements and in addition receive special pay for foreign duty (including sea duty). Since only the Air Force shows the distribution by the number of physicians, dentists, or veterinarians from FY64 to FY68 and none of the services give a breakdown by rank, the special-pay index was computed using average annual rates across ranks and for all the health professions. It might be noted that there is no differentiation by rank in diving-duty and hostile-fire pay either; the variations of pay by rank in the health professions were

*The Army does not give any detail for flying pay until the FY68 budget; hence Army flying-pay data are included in the index for FY67 and FY68 only.

presumed to be of little consequence in Table 11. Special pay for enlisted personnel changed only in the "Diving duty" and "Other" categories (see Table 12). The FY67 and FY68 special-pay indexes are based on Navy data alone since no Army, Air Force, or Marine Corps data are available in this pay element; 1966 is also computed with less than full data because the 1967 budget does not list any special-pay breakdown for the Army or the Marine Corps.

TABLE 9
Incentive-Pay Elements by Rank at FY63 Rates²⁻⁸

Rank	Flying duty, dollars	Submarine duty, dollars	Other incentive pay, dollars
O-8—O-10	1980	1980	—
O-7	1920	1980	—
O-6	2940	2910	—
O-5	2933	2934	—
O-4	2840	2776	—
O-3	2372	2201	—
O-2	1829	1740	—
O-1	1335	1300	—
E-8—E-9	1260	1260	—
E-7	1256	1253	—
E-6	1159	1144	—
E-5	1020	969	—
E-4	835	794	—
E-3	705	694	—
E-2	657	619	—
E-1	644	—	—
Flying noncrew			
Officers	1320	—	—
Enlisted personnel	660	—	—
Demolition			
Officers	—	—	1320
Enlisted personnel	—	—	660
Parachute			
Officers	—	—	1320
Enlisted personnel	—	—	660
Low-high pressure chamber			
Officers	—	—	1320
Enlisted personnel	—	—	660

Consequently the 1966 budget forecast figures were used.* For the 7-year period the bulk of enlisted special pay was for sea duty and duty in certain places; the rates for the enlisted ranks remained unchanged for the entire period: \$270 for E-9, E-8, and E-7; \$240 for E-6, \$192 for E-5; \$156 for E-4; \$108 for E-3; and \$96 for E-2 and E-1. Diving duty required special handling because the individual services treated divers differently; therefore Marine, Navy, and Army divers were included but were listed separately. Table 12 shows the special-pay computation.

* Thus the estimates were made 18 to 24 months before the end of the fiscal year instead of 6 to 12 months before, as in other areas. Changes of considerable magnitude took place during the period after the 1966 estimate had been made for the FY66 and the FY67 budgets.

TABLE 10
Computation of Incentive-Pay Index for Officers²⁻⁸
(P, per capita pay in dollars, Q, man-years,
PQ, total payment, in thousands of dollars)

Computation item	Rank					Total	Index
	0-4	0-3	0-2	0-1	All other		
P ₆₃	2,838	2,370	1,825	1,320	— ^a	—	—
Q ₆₂	22,003	37,421	19,165	7,765	—	—	—
P ₆₃ Q ₆₂	62,444	99,668	34,976	10,327	70,071	266,506	—
P ₆₂ Q ₆₂	62,486	88,665	35,211	10,324	70,071	266,757	100.1
Q ₆₄	20,190	38,401	15,475	6,652	—	—	—
P ₆₃ Q ₆₄	57,299	91,010	28,210	8,846	60,162	245,557	—
P ₆₄ Q ₆₄	57,062	87,896	27,376	8,517	60,162	241,015	98.2
Q ₆₅	20,378	37,504	14,888	7,328	—	—	—
P ₆₃ Q ₆₅	57,833	88,884	27,174	9,746	59,572	243,206	—
P ₆₅ Q ₆₅	57,227	85,391	25,948	9,214	59,572	237,352	97.5
Q ₆₆	24,481	38,170	15,429	7,675	—	—	—
P ₆₃ Q ₆₆	69,477	90,463	28,158	10,208	67,802	266,371	—
P ₆₆ Q ₆₆	68,131	87,707	26,426	9,682	67,802	259,748	97.6
Q ₆₇	25,147	35,844	13,235	8,900	—	—	—
P ₆₃ Q ₆₇	71,376	84,950	24,154	11,837	80,801	273,118	—
P ₆₇ Q ₆₇	69,260	81,015	22,387	11,260	80,801	264,723	96.9
Q ₆₈	29,657	32,365	11,201	10,161	—	—	—
P ₆₃ Q ₆₈	84,167	76,705	25,917	13,514	87,872	288,175	—
P ₆₈ Q ₆₈	81,831	73,000	23,732	12,780	87,872	279,215	96.9

^aNo change.

TABLE 11
Computation of Special-Pay Index for Officers²⁻⁸

(P, per capita pay, in dollars, Q, man-years, PQ, total payment, in thousands of dollars)

Computation item	Doctors, dentists, and veterinarians	Personal money for generals	Diving duty	Hostile fire	Total	Index
P ₆₃	1,871	1115	1320	660	—	—
Q ₆₂	17,300	136	571	—	—	—
P ₆₃ Q ₆₂	32,368	152	754	—	33,274	—
P ₆₂ Q ₆₂	32,242	153	754	—	33,119	99.6
Q ₆₄	7,380	59	71	1482	—	—
P ₆₃ Q ₆₄	13,803	66	110	978	14,962	—
P ₆₄ Q ₆₄	13,857	70	83	966	14,976	100.1
Q ₆₅	18,386	117	422	3047	—	—
P ₆₃ Q ₆₅	34,400	164	557	1991	37,112	—
P ₆₅ Q ₆₅	37,717	158	557	1992	40,424	108.9
Q ₆₆	18,705	150	422	7505	—	—
P ₆₃ Q ₆₆	34,997	167	557	—	37,474	—
P ₆₆ Q ₆₆	38,274	156	557	5490	44,477	109.4
Q ₆₇ ^a	12,315	96	440	5575	—	—
P ₆₃ Q ₆₇	23,041	107	580	3680	27,408	—
P ₆₇ Q ₆₇	25,196	94	581	4358	30,229	110.3
Q ₆₈ ^a	12,586	97	543	6034	—	—
P ₆₃ Q ₆₈	23,548	108	717	3982	28,175	—
P ₆₈ Q ₆₈	25,686	95	717	4709	31,207	110.1

^aAfter 1966 the budget estimates contain detail in this category only from the Navy.

Proficiency Pay. Enlisted members of the armed forces in critical ratings receive proficiency pay as an incentive to encourage retention of trained personnel in these ratings. The pay in each element is fairly constant. Proficiency level 3(P-3) and the special-proficiency (SP) category were established during FY64, and proficiency payments for P-2 and P-1 were raised in that year. Thus FY64 shows an increase, since pay was at the lower rate

TABLE 12
Computation of Special-Pay Index for Enlisted Personnel²⁻⁸

(P, per capita pay, in dollars; Q, man-years,
PQ, total payment, in thousands of dollars)

Computation item	Foreign and sea duty	Diving duty			Hostile fire	Other	Total	Index
		Army	Navy	Marines				
P ₆₃	No change	893	865	660	660	660	137,120	—
Q ₆₂	—	50	2128	—	—	—	—	—
P ₆₃ Q ₆₂	135,234	45	1831	—	—	—	137,120	—
P ₆₂ Q ₆₂	135,234	33	1838	—	—	—	137,105	100.0
Q ₆₄	—	150	2500	186	5378	—	—	—
P ₆₃ Q ₆₄	84,621	99	2163	123	3549	—	90,555	—
P ₆₄ Q ₆₄	84,621	126	2175	123	3549	—	90,594	100.0
Q ₆₅	—	150	2624	113	8403	—	—	—
P ₆₃ Q ₆₅	72,935	99	2270	75	5546	—	80,925	—
P ₆₅ Q ₆₅	72,935	144	2265	75	5546	—	80,965	100.0
Q ₆₆ ^a	—	150	2801	113	9885	43,010	—	—
P ₆₃ Q ₆₆	89,141	99	2423	75	6525	28,387	126,650	—
P ₆₆ Q ₆₆	89,141	146	2481	75	6525	33,300	131,668	104.0
Q ₆₇ ^b	—	—	3082	—	—	73,733	—	—
P ₆₃ Q ₆₇	76,881	—	2666	—	—	48,664	128,211	—
P ₆₇ Q ₆₇	76,881	—	2717	—	—	57,512	137,110	106.9
Q ₆₈ ^b	—	—	3157	—	—	80,027	—	—
P ₆₃ Q ₆₈	80,375	—	2731	—	—	52,812	135,924	—
P ₆₈ Q ₆₈	80,375	—	2778	—	—	62,421	145,574	107.1

^aBased on forecasts except for Navy.

^bAfter 1966 the budget estimates contain detail in this category only from the Navy.

for less than a full year, but the full increase took place in FY65, and the rate has remained at that level. Total DOD average figures became the base, and they were weighted by the total number receiving each pay category (see Table 13).

Reenlistment Bonus. Payments are made to enlisted persons who reenlist within 3 months after the date of discharge or release from compulsory or voluntary active duty or who voluntarily extend their enlistment for at least 2 years. The cumulative amount paid for first and subsequent reenlistments may not exceed \$2000, and the bonus may not be paid for that portion of a reenlistment that will extend beyond a period of 20 years of active Federal service. The basis for computing the payment is the basic pay received by the reenlisting member. For the first reenlistment the lump-sum payment is computed by multiplying the number of years for which the member reenlists by an amount

equal to 1 month's basic pay at the rate to which he was entitled on the date of last discharge or release from active duty. The second, third, or fourth and subsequent reenlistment bonuses are computed by multiplying the number of years of the reenlistment by two-thirds, one-third, or one-sixth of 1 month's basic pay to which the member was entitled on the date of last discharge or release from active duty. There may be a different mix of length of and number of reenlistments in any one year, but this is probably minor. As a result the enlisted-personnel basic-pay index was considered proportional to the reenlistment-bonus-payment price.

TABLE 13
Computation of Proficiency-Pay Index²⁻⁸
(P, per capita pay, in dollars; Q, man-years,
PQ, total outlays, in thousands of dollars)

Computation item	Proficiency level			SP	Total	Index
	P-3	P-2	P-1			
P ₆₃	1,200	720	360	300	—	—
Q ₆₂	—	7,704	53,577	—	—	—
P ₆₃ Q ₆₂	—	5,547	19,280	—	24,827	—
P ₆₂ Q ₆₂	—	5,547	19,280	—	24,827	100.0
Q ₆₄	1,539	10,527	116,475	28,926	—	—
P ₆₃ Q ₆₄	1,847	29,107	41,931	8,6.8	81,563	—
P ₆₄ Q ₆₄	1,847	31,502	47,071	10,399	90,819	111.3
Q ₆₅	6,851	60,943	91,974	36,042	—	—
P ₆₃ Q ₆₅	8,221	43,879	33,111	10,813	96,024	—
P ₆₅ Q ₆₅	8,221	48,940	44,130	12,975	114,266	119.0
Q ₆₆	7,568	67,396	83,859	39,000	—	—
P ₆₃ Q ₆₆	9,081	48,525	30,189	11,700	90,495	—
P ₆₆ Q ₆₆	9,081	53,998	41,786	14,040	118,905	119.5
Q ₆₇	9,308	72,840	95,133	47,871	—	—
P ₆₃ Q ₆₇	11,170	52,445	34,356	14,361	112,332	—
P ₆₇ Q ₆₇	11,170	58,881	57,029	17,233	134,313	119.6
Q ₆₈	9,664	87,677	93,111	52,000	—	—
P ₆₃ Q ₆₈	11,597	63,127	33,520	15,600	123,844	—
P ₆₈ Q ₆₈	11,597	70,729	46,903	18,719	117,948	119.5

ALLOWANCES

Quarters Allowance. Each officer and enlisted person is provided quarters or payments in lieu thereof. The amount of payment depends on the rank or grade of the individual military member and whether he has dependents. In addition there is a payment to persons who occupy certain quarters deemed inadequate by the service secretary; this amounts to the difference between a full quarters allowance and the fair rental value of the quarters occupied.

For the computation of a quarters allowance the separate elements were treated differently; the allowance by rank for both officers and enlisted persons with dependents changed, and the change has been accounted for in Table 14.

Individuals without dependents have been included unchanged, since almost the same allowance was granted to each rank or grade for the 7-year period. During the period FY62-FY64 the Army gave totals with no detail by rank; therefore for those years DOD price averages were computed from a collation of the data available from Navy, Marine Corps, and Air Force detail. For the rest of the period, Army detail is included.

The average-price computation of payments for living in substandard housing provided by the Federal government is the difference between the quarters allowance and the fair rental value of the housing provided. This average is subject to all the mix problems discussed above. There are families of different sizes in the houses, the grade or rank of the residents may change, the fair rental value may change rapidly, not because the housing has changed but because the reports of inadequacy may be more convincing, and finally the substandard housing may be in a different area from year to year. The total DOD per capita substandard-housing payment was £183 in 1962, £557 in 1963, £862 in 1964, £664 in 1965, £682 in 1966, £648 in 1967, and £648 in 1968. This element, less than one-half of 1 percent of the total 1967 quarters allowance, was therefore not included in the index computation. For both officers and enlisted persons the index is computed on the basis of distributions of ranks or grades with the per capita rates as the prices and the number of recipients with dependents for each year as the quantities. There was no change in the rates for enlisted personnel or officers without dependents; as a result the current-dollar and constant-dollar values for those without dependents is the same for each year. Table 14 shows separate computations of the quarters indexes for officers and enlisted personnel. The allowance for quarters increased sharply in FY64 and has remained fairly stable since that time.

Officer's Subsistence. The officer's subsistence allowance remained unchanged at £575 per year throughout the time period and for all services.

Uniforms and Clothing. The officers' uniform-and-clothing allowance includes payments to reserve officers and enlisted persons temporarily appointed to warrant or commissioned rank for the initial purchase of required uniforms. For reserve officers the payment is limited to £200. The officer's uniform allowance remained unchanged over the time period.

The enlisted personnel uniform-and-clothing allowance contained cost changes. Each male member at the time of first enlistment or after an intervening time period between separation and reenlistment of 90 days is entitled to a full bag of clothing. Officer candidates are also entitled to officer-type uniforms, as are aviation cadets. Female enlisted personnel are entitled to an initial clothing allowance. When an enlisted person advances to pay grade E-7 on active duty, he is given a special clothing allowance. There is also a £300 civilian-clothing allowance for members assigned where civilian clothing is required. After 6 months of service each enlisted person is entitled to a basic clothing-maintenance allowance; if that person has been authorized a civilian-clothing allowance he is entitled to an additional basic clothing allowance. After 36 months of service a monthly standard maintenance allowance is authorized with which the person by prudent management can replace items of clothing as they wear out.

Since the services classified the clothing allowance to enlisted personnel on a different basis, and since the services' distribution was not additive, the

TABLE 14
Computation of Index for Basic Quarters Allowance for Officers and Enlisted Personnel

(P, per capita allowance, in dollars; Q, man-years; PQ, total quarters allowance, in thousands)

Category	P ₆₃	Q ₆₂ ^a	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	Q ₆₄ ^a	P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆
Officers with dependents												
O-10-O-7	2051	664	1,362	701	296	607	714	476	976	1,148	513	1,008
O-6	1640	7,891	12,941	11,373	5,197	8,523	10,608	7,826	12,835	16,341	8,267	13,508
O-5	1635	20,123	32,901	30,587	14,713	24,076	27,808	20,366	33,298	38,191	21,190	34,691
O-4	1419	37,309	52,941	50,023	23,150	32,850	40,294	29,676	42,110	51,656	32,930	46,781
O-3	1179	64,663	76,238	74,601	41,062	38,412	64,081	52,429	61,814	81,827	55,535	65,484
O-2	983	36,467	35,847	34,082	18,739	18,420	26,984	25,376	24,945	36,542	24,785	24,300
O-1	701	14,869	10,468	9,912	9,537	6,714	12,600	11,807	10,424	19,503	12,799	9,614
WO-4	1330	1,101	2,003	1,952	1,100	1,573	1,914	2,074	2,966	3,614	2,316	3,560
WO-3	1227	2,293	2,814	2,655	1,769	2,171	2,760	2,686	3,296	4,192	2,474	3,071
WO-2	1128	2,843	3,207	2,938	1,021	1,152	1,471	3,035	3,423	4,370	2,990	3,370
WO-1	1026	534	548	548	507	520	670	1,422	1,459	1,879	1,496	1,507
Officers without dependents	<u>—^b</u>	<u>—</u>	<u>4,365</u>	<u>4,365</u>	<u>—</u>	<u>20,307</u>	<u>20,307</u>	<u>—</u>	<u>27,804</u>	<u>27,804</u>	<u>—</u>	<u>36,411</u>
Subtotal	—	—	235,635	223,937	—	165,305	210,211	—	225,350	287,367	—	242,511
Officers index for quarters			95.6			127.2			127.5			
Enlisted personnel with dependents												
E-9	1112	1,885	2,096	2,089	5,634	6,265	8,113	7,045	7,834	10,145	7,163	7,911
E-8	1100	8,068	8,875	8,845	12,855	14,141	18,511	20,768	22,845	29,905	21,673	23,875
E-7	1098	38,538	42,315	42,227	52,564	57,715	72,475	72,910	80,055	100,568	73,591	80,644
E-6	1090	59,444	64,794	64,614	98,353	107,205	129,944	153,374	167,178	202,626	154,126	167,937
E-5	1046	67,302	70,398	70,196	164,720	172,297	207,187	246,109	257,430	312,330	248,950	260,437
E-4	1001	59,466	59,525	59,601	152,685	152,838	183,817	205,059	205,264	243,586	195,885	196,085
E-3	794	43,343	31,414	31,415	99,198	78,763	85,585	151,058	119,904	129,756	141,569	112,496
E-2	702	10,512	7,379	7,384	31,920	22,408	25,396	44,903	31,522	35,909	39,286	27,550
E-1	713	2,220	1,583	1,589	4,343	3,097	3,550	6,782	4,836	5,559	8,322	5,946
Enlisted personnel without dependents	<u>—^b</u>	<u>—</u>	<u>384,254</u>	<u>384,254</u>	<u>—</u>	<u>15,516</u>	<u>15,516</u>	<u>—</u>	<u>25,338</u>	<u>25,338</u>	<u>—</u>	<u>24,693</u>
Subtotal	—	—	675,633	675,214	—	630,215	750,094	—	922,206	1,095,722	—	907,513
Enlisted personnel index for quarters			100.0			119.0			118.8			
Subtotal, officers and enlisted personnel	—	—	911,268	899,151	—	795,750	960,305	—	1,117,556	1,081,089	—	1,150,103
Aggregate quarters index			98.7			120.7			120.5			
Substandard-housing differential	—	—	—	1,728	—	—	8,549	—	—	9,461	—	10,341
Total quarters payment	—	—	—	900,929	—	—	968,858	—	—	1,392,550	—	—

^aThese data are for Navy, Marine Corps, and Air Force. Army data for these years show only totals.

^bNo change.

All Air Force enlisted personnel included in "Without dependents" - only undifferentiated total was available for enlisted personnel.

TABLE 14

Officers Allowance for Officers and Enlisted Personnel of All Services²⁻⁸

(Dollars, Q, man-years; PQ, total quarters allowance, in thousands of dollars)

64	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	P ₆₅ Q ₆₆	Q ₆₇	P ₆₃ Q ₆₇	P ₆₅ Q ₆₇	Q ₆₈	P ₆₃ Q ₆₈	P ₆₅ Q ₆₈
14	476	976	1,148	513	1,052	1,238	518	1,062	1,250	500	1,026	1,206
08	7,826	12,835	16,341	8,267	13,558	17,242	9,497	15,575	19,591	9,288	15,232	19,310
08	20,366	33,298	38,491	21,190	34,646	40,048	25,560	41,791	48,408	25,262	41,303	49,085
91	29,676	42,410	51,656	32,950	46,728	57,310	38,197	54,202	66,485	40,105	56,909	71,397
81	52,429	61,814	81,827	55,535	65,476	86,669	64,726	76,312	96,330	61,209	72,165	96,075
81	25,376	24,945	36,532	24,785	24,364	35,690	21,697	21,328	31,244	22,214	21,836	35,907
00	14,807	10,424	19,503	12,799	9,010	16,910	16,865	11,873	22,282	18,478	13,009	27,904
14	2,074	2,966	3,614	2,316	3,312	4,031	2,582	3,692	4,499	2,583	3,691	4,767
60	2,686	3,296	4,192	2,474	3,036	3,862	2,262	3,775	3,530	1,885	2,313	3,049
71	3,035	3,423	4,33	2,990	3,373	4,306	2,622	2,958	3,775	2,978	3,359	5,568
70	1,422	1,459	1,879	1,496	1,535	1,977	1,067	1,173	1,373	1,447	1,563	7,427
07	-	27,804	27,804	-	36,479	36,479	-	35,238	35,238	-	39,765	39,765
11	-	225,330	227,367	-	242,569	305,771	-	270,979	337,905	-	275,174	361,460
		127.5			126.1			124.7			131.4	
13	7,045	7,834	10,145	7,163	7,935	10,315	8,524	9,479	12,274	9,295	10,336	13,384
11	20,768	22,845	29,905	21,673	23,840	31,209	24,775	27,253	35,676	26,248	28,873	37,797
75	72,910	80,055	100,568	73,591	80,803	101,466	86,483	94,958	119,218	91,276	100,221	125,826
44	153,374	167,178	202,626	154,126	167,997	203,631	168,558	181,728	222,845	178,508	194,574	235,843
27	246,109	257,430	312,330	248,950	260,402	313,678	265,393	277,601	334,396	292,706	306,170	368,810
17	205,059	205,264	243,386	195,885	196,081	232,550	235,279	225,504	265,740	268,927	269,196	317,574
35	151,048	119,904	129,756	141,569	112,406	121,273	128,337	101,900	100,709	131,084	106,463	114,376
26	14,903	31,522	35,900	19,286	27,579	31,581	46,892	32,918	37,639	39,421	27,674	31,745
50	6,732	4,836	5,359	8,322	5,934	7,242	22,029	15,707	14,869	17,245	12,296	14,149
16	-	27,348	27,338	-	24,619	24,619	-	28,382	28,382	-	32,704	32,704
91	-	922,206	1,097,722	-	907,598	1,077,766	-	997,430	1,184,718	-	1,088,507	1,292,808
		118.8			118.7			118.3			118.8	
05	1,117,556	1,113,689		1,150,165	1,384,747		1,268,109	1,522,664		1,364,681	1,654,268	
		120.5			120.4			120.0			121.3	
49	-	9,461	-		8,511	-		7,080	-		6,438	
51	-	1,593,710	-		1,493,741	-		1,529,711	-		1,660,706	

available for enlisted personnel.

B

TABLE 15
Computation of Uniform-and-Clothing Index for Officers and Enlisted Personnel

(P, per capita allowance, in dollars; Q, number of recipients;
 PQ, total outlays, in thousands of dollars)

Category	P ₆₃	Q ₆₂	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	Q ₆₄	P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆
Officers	— ^a	—	12,979	12,979	—	11,124	11,124	—	9,759	9,759	—
Enlisted personnel											
Army											
Male	153.00	313,500	47,966	48,267	285,000	31,605	46,920	214,340	32,791	34,914	450,873
Female	211.18	4,800	1,014	1,014	4,200	887	1,204	3,600	760	1,051	3,600
Reserve	96.00	29,400	2,822	2,994	700	67	69	660	63	68	218
Navy											
Male	169.45	117,341	19,883	19,883	98,056	16,616	16,842	103,138	17,427	17,348	148,077
Female	217.00	2,419	597	598	1,899	369	516	2,468	610	735	2,217
Officer Candidate School	221.09	—	—	—	—	—	—	3,314	739	651	2,834
Aviation	219.78	—	—	—	6,081	1,345	1,339	1,569	315	382	1,702
Reserve	114.00	34,000	3,876	3,908	33,500	3,319	3,102	29,700	3,386	3,554	31,196
Active duty	56.00	34,880	1,949	1,948	26,670	1,391	1,315	27,424	1,536	1,331	27,000
E-7, E-8, and E-9	— ^a	—	2,470	2,470	—	1,166	1,166	—	1,208	1,208	—
Marine Corps											
Male	192.20	38,011	7,308	7,363	38,942	7,487	7,767	31,821	6,118	6,347	37,290
Female	267.00	1,140	304	304	1,040	278	310	1,040	278	310	1,050
Aviation	117.05	1,218	143	143	—	—	—	882	103	121	827
Broken enlistments	72.85	600	44	44	600	44	47	400	29	31	400
Active reserve	192.20	—	—	—	—	—	—	—	—	—	—
Air Force											
Male	178.65	119,513	21,351	21,351	89,691	16,023	16,522	87,803	15,686	16,251	90,660
Female	272.90	1,800	491	491	2,000	546	571	2,000	546	546	2,000
Male, Officer Training School Program	177.12	—	—	—	1,292	760	760	1,999	531	529	2,667
Female, Officer Training School Program	273.20	—	—	—	125	34	34	125	34	36	125
Other	85.00	24,122	2,050	2,050	—	—	—	—	—	—	—
Civilian											
E-7, E-8, and E-9	— ^a	—	431	431	—	560	560	—	635	635	—
All other	72.00	19,635	1,414	1,414	25,043	1,801	1,801	20,146	1,451	1,451	18,473
Standard maintenance											
Civilian and E-7, E-9	86.40	28,647	2,442	2,705	25,508	2,204	2,205	30,338	2,621	2,621	32,748
Other	72.00	864,162	62,320	59,140	168,964	55,365	55,366	165,259	55,099	55,099	174,313
Army, male	64.80	146,351	22,444	22,445	144,155	21,671	21,705	125,796	21,132	21,132	129,017
Subtotal, officers and enlisted personnel	—	254,350	252,789	—	241,849	246,717	—	218,848	212,970	—	—
Aggregate index					97.48		102.30		101.40		
Supplementary and other					18.98		15.019		15.023		
Total DOD					20.73		21.176		21.143		

^aNo change.

TABLE 15

Food-and-Clothing Index for Officers and Enlisted Personnel²⁻⁸

Per capita allowance, in dollars; Q, number of recipients;
 PQ, total outlays, in thousands of dollars)

P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	P ₆₆ Q ₆₆	Q ₆₇	P ₆₃ Q ₆₇	P ₆₇ Q ₆₇	Q ₆₈	P ₆₃ Q ₆₈	P ₆₈ Q ₆₈
11,124	11,124	—	9,779	9,759	—	12,886	12,886	—	14,603	14,603	—	12,234	12,234
43,605	46,920	214,340	32,794	34,914	150,873	68,984	74,656	506,396	77,479	113,254	498,116	76,212	144,932
887	1,204	3,600	760	1,051	3,600	760	1,063	3,600	760	1,140	3,600	760	1,174
67	69	660	63	68	218	21	22	199	19	26	79	8	16
16,616	16,842	103,138	17,477	17,348	148,057	25,088	24,609	98,885	16,756	19,760	114,604	19,420	24,092
469	516	2,468	610	735	2,217	548	670	2,085	515	646	2,200	543	681
—	—	3,344	719	651	2,834	627	629	5,712	1,263	1,320	2,650	586	612
1,345	1,339	1,569	315	382	1,702	374	410	1,962	431	530	1,733	381	472
3,819	4,102	29,700	3,386	3,554	31,196	3,556	3,707	35,500	4,047	5,212	27,500	3,135	4,244
1,194	1,315	27,424	1,536	1,331	27,000	1,512	1,279	37,951	2,125	2,020	27,000	1,512	1,509
1,166	1,166	—	1,208	1,208	—	2,002	2,002	—	2,773	2,773	—	2,236	2,236
7,487	7,767	31,821	6,118	6,347	37,290	7,169	7,737	61,934	11,907	16,549	86,236	16,579	23,689
378	310	1,040	278	310	1,050	260	310	1,050	280	325	1,496	399	465
—	—	882	103	121	827	97	98	2,240	262	321	2,010	235	299
44	47	400	29	31	400	29	36	400	29	400	29	29	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—
16,023	16,522	87,803	15,686	16,251	90,660	16,196	16,780	—	—	—	—	—	—
546	571	2,000	546	546	2,000	546	546	—	—	—	—	—	—
760	760	2,999	531	529	2,667	472	470	—	—	—	—	—	—
34	125	34	36	125	34	36	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
560	560	—	635	635	—	588	588	—	574	574	—	399	339
1,803	1,803	20,146	1,451	1,451	18,474	1,330	1,330	15,986	1,151	1,139	16,175	1,165	1,514
43,180	44,480	911,266	15,928	15,927	798,830	40,261	40,262	867,108	43,702	51,509	964,644	48,618	68,098
2,204	2,205	10,138	2,621	2,621	12,818	2,815	2,815	15,249	3,045	3,164	11,565	2,900	3,142
55,465	55,306	765,259	55,089	55,089	714,411	55,753	55,752	419,311	55,450	51,531	365,958	26,115	31,233
21,673	21,703	125,296	21,412	21,414	129,019	21,412	21,412	219,119	15,494	19,821	248,115	16,077	23,224
21,819	216,727	—	218,818	217,056	—	263,210	270,075	—	212,465	286,557	—	229,703	347,234
102,56	—	101,46	—	—	101,38	—	—	—	128,87	—	—	151,17	—
5,019	—	—	11,023	—	—	28,780	—	—	61,114	—	—	73,536	—
211,746	—	—	215,143	—	—	298,815	—	—	317,890	—	—	121,590	—

B

aggregate-index computation shows several of the clothing categories separately.* The supplementary and other clothing elements for each of the services were small, and there were different classes for each service. As a result they were omitted from the calculation, and they are assumed to move as all other clothing does in the aggregate-index computation.

In each case—Army, Navy, Marine Corps, Air Force, basic maintenance, standard maintenance—the number of recipients for each year became the quantities, and the per capita rates became the prices; values by rank or grade were computed by multiplying P_n by Q_n for current-dollar outlays and $P_o Q_n$ for constant-dollar outlays. The sum of the current outlays divided by the constant-dollar outlays produced the uniform-and-clothing index in Table 15. No quantities are shown for items whose per capita rates remain unchanged over the whole period. The current outlays are merely repeated in the constant-dollar column.

Family Separation. The family-separation allowance was first paid in FY64, and the rate has remained substantially unchanged since that time. A constant index of 100.0 was presumed for this element.

Severance Pay. Individuals leaving active service may receive several kinds and combinations of payments. They are the following:

(a) Lump-sum and terminal-leave pay for officers, consisting of the monetary value of unused leave up to a maximum of 60 days, i.e., daily rate of basic pay, the applicable daily rate for quarters, and the daily rate of subsistence allowance multiplied by the number of days of unused leave. The applicable basic-pay, quarters, and subsistence-allowance indexes were used here.

(b) For enlisted personnel there is a composite rate based on the member's basic pay plus \$0.70 per day of accrued leave for subsistence allowance (without regard to grade) and \$1.25 per day of accrued leave for quarters allowance if the member has dependents and is grade E-5 or above.

(c) Authorized donations for an enlisted member separated with a dishonorable, bad-conduct, or undesirable discharge amount to the difference between the funds in his possession, if less than \$25, and \$25. Funds in his possession include any item paid to him at the time of discharge excluding mileage and cash advanced for transfer incident to the furnishing of transportation in kind. Since the maximum is \$25, the rate for this item was considered constant.

(d) Lump-sum readjustment payments amounting to \$2000 for each permanently commissioned officer who has been considered but not recommended for continuation by a board authorized by the service secretaries. The rate has remained unchanged over the 7-year period.

(e) Lump-sum payments to reservists involuntarily released from active duty after having completed at least 5 years of continuous active duty. Payment consists of 2 months of basic pay for each year of active duty but not to exceed 18 years. The maximum may not be more than 2 years of basic pay or \$15,000, whichever is less. The basic-pay index was used to deflate payments for this element of severance pay.

*No Air Force detail is available for FY67 and FY68. Average prices are computed with the Air Force omitted for those 2 years.

(f) Severance pay, failure of promotion, is a payment to regular commissioned and warrant officers discharged by reason of failure of promotion or for a reason other than physical disability. The sum is computed at date of discharge at the rate of 2 months' pay for each year of commissioned service; it is not to exceed 2 years of basic pay. The basic-pay index was used to deflate payments for failure-of-promotion severance pay.

Table 16 gives a constant-dollar value for each current expenditure. The deflated value is found for each element by dividing the current year's expenditures by the appropriate index. The sum of the current dollars divided by the constant-dollar figures produces the severance-pay index.

Social Security Contributions by the Employer. The basic pay by rank or grade was multiplied by the percentage of social security tax rates, if the per capita rates were less than the maximum taxable wage; if the per capita base-pay rate was above the maximum taxable wage, the tax rate was applied to the maximum taxable wage (see Table 17).¹⁰ The result was an average individual tax payment T that was multiplied by the number of man-years in the grade. These products became the current tax outlays for the year $T_n Q_n$. The number of man-years was also multiplied by the individual tax payment for the base period T_{63} . These products became the constant-dollar tax outlays $T_{63} Q_n$. The sum of the $T_n Q_n$ was divided by the sum of the $T_{63} Q_n$ to obtain the index of employer contribution to Social Security shown in Table 18. Whenever the average pay was greater than the maximum taxable wages, the quantity was included in the maximum column, and a blank remained in the O-2, WO-2, and WO-1 columns.

OTHER PROGRAMS

There remains subsistence for enlisted persons, permanent change of station, other military costs, and reimbursable expenditures. These four items are separate elements in the program portion of the budget on a par with pay and allowances. The reasoning involved in not computing an index for other military costs and reimbursable expenditures was suggested in the section, "Compensation for Active Forces."

Enlisted subsistence and permanent change of station, then, are the two remaining elements in active-forces compensation for which indexes must be developed. They are similar in that each service has such a different classification method that no overall per capita rates could be developed. As a result separate computations were made by service and these were then aggregated to form a single index for each element.

Enlisted Subsistence. Separate per capita rates and the number of recipients for cash and in-kind payments were established for Army, Navy, Marine Corps, and Air Force. These became the price and quantity items for the computations of the index. The cash items included payments for those enlisted persons entitled to mess separately, payments for subsistence on days of leave, payments to individuals where messing facilities were not available, and the cost of augmentation rations. The in-kind items include mess costs in the zone of interior, afloat, and overseas; where possible, costs of special and operational rations are included. There were some items with very small total

TABLE 16

Computation of Severance-Pay Aggregate Index^{a-b}
(I, index; PQ, severance-pay outlays, in thousands of dollars)

Item	P ₆₃ Q ₆₃	I ₆₂	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	I ₆₄	P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	I ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	I ₆₆	P ₆₃ Q ₆₆
Lump-sum terminal-leave payments^a												
Basic pay												
Officers	37,874	100.1	23,891	23,915	109.2	36,810	40,197	115.7	36,818	42,598	125.2	34,015
Enlisted personnel	116,514	100.1	109,782	109,892	109.2	123,505	134,868	115.7	119,595	138,371	125.2	114,543
Subsistence												
Officers	3,725	100.0	2,388	2,388	100.0	2,451	2,451	100.0	2,541	2,541	100.0	2,611
Enlisted personnel	12,610	101.4	12,754	12,933	99.4	23,275	23,135	101.3	21,165	21,440	104.2	22,859
Quarters												
Officers	5,263	96.9	5,154	4,924	125.0	4,261	5,326	126.9	4,234	5,373	125.4	4,091
Enlisted personnel	26,353	99.7	29,668	29,579	108.0	27,859	30,088	117.8	24,126	28,421	118.1	21,706
Severance												
Officers ^b	7,341	100.1	7,632	7,640	109.2	5,486	5,991	115.7	4,839	5,599	125.2	4,816
Disability												
Officers ^b	1,269	100.1	227	227	109.2	1,165	1,273	115.7	959	1,109	125.2	880
Enlisted personnel ^b	6,279	100.1	7,071	7,078	109.2	6,636	7,246	115.7	6,431	7,441	125.2	6,441
Lump-sum adjustments												
Reserve ^b	4,527	100.1	2,112	2,114	109.2	3,555	3,882	115.7	2,092	2,421	125.2	1,924
Readjustment	1,146	100.0	764	764	100.0	6,728	1,728	100.0	1,544	1,544	100.0	1,305
Authorized donations, enlisted personnel	271	100.0	309	309	100.0	74	74	100.0	78	78	100.0	10
Total	223,172	—	201,752	201,833	—	241,805	256,259	—	224,422	256,936	—	215,546
Aggregate index						100.0			106.0			114.5

^aLump-sum terminal-leave payments were distributed in basic pay, quarters, and subsistence according to the figures given in Table 4. The

Year	Officer basic pay	Officer quarters	Enlisted basic pay	Enlisted quarters
1962	87.9	12.1	82.0	18.0
1963	87.8	12.2	81.6	18.4
1964	88.3	11.7	81.8	18.2
1965	88.2	11.8	83.0	17.0
1966	89.4	10.6	84.8	15.2
1967	89.4	10.6	86.3	13.7
1968	89.2	10.0	86.0	14.0

^bPay item amounts to 2 months' basic pay for each year of commissioned services (maximum of 2 years' pay).

TABLE 16

Composition of Severance-Pay Aggregate Index - 1

(in thousands of dollars)

	$P_{64}Q_{64}$	I_{65}	$P_{63}Q_{65}$	$P_{65}Q_{65}$	I_{66}	$P_{63}Q_{66}$	$P_{65}Q_{66}$	I_{67}	$P_{63}Q_{67}$	$P_{67}Q_{67}$	I_{68}	$P_{63}Q_{68}$	$P_{68}Q_{68}$
10	40,197	115.7	36,818	42,598	125.2	34,072	42,658	129.7	35,345	45,843	129.4	41,633	53,873
35	131,868	115.7	119,595	138,371	125.2	114,569	143,441	129.7	121,554	157,656	129.4	150,134	194,274
30	2,451	100.0	2,541	2,541	100.0	2,655	2,655	100.0	2,399	2,399	100.0	2,714	2,714
75	23,135	101.3	21,165	21,440	104.2	22,812	23,770	114.5	19,503	22,331	117.0	24,508	28,674
61	5,326	126.9	4,234	5,373	125.4	4,033	5,058	124.4	4,376	5,436	131.1	4,976	6,523
59	30,088	117.8	24,126	28,421	118.1	21,787	25,731	118.4	21,174	25,070	117.4	27,004	31,703
86	5,991	115.7	5,839	5,599	125.2	4,891	6,123	129.7	6,598	8,557	129.4	4,549	5,887
55	1,273	115.7	959	1,109	125.2	892	1,117	129.7	1,571	2,037	129.4	1,620	2,097
86	7,246	115.7	6,431	7,441	125.2	6,473	8,104	129.7	10,065	13,054	129.4	11,162	14,443
55	3,882	115.7	2,092	2,421	125.2	1,929	2,415	129.7	3,135	4,066	129.4	2,686	3,476
28	1,728	100.0	1,544	1,544	100.0	1,388	1,388	100.0	80	80	100.0	88	88
74	74	100.0	78	78	100.0	68	68	100.0	101	101	100.0	76	76
95	256,259	—	224,422	256,936	—	215,569	262,528	—	225,895	286,630	—	271,150	343,828
106.0			114.5			121.8			126.9			126.8	

severance according to the figures given in Table 4. The proportions used are shown in the accompanying tabulation.

quarters

(minimum of 2 years' pay).

B

Total Employer
(T, per c)

TABLE 17

Employers' per Capita Contribution to Social Security Tax, 1961-1968¹⁰

Year	Percent of wages paid in calendar year	Maximum taxable wages, ^a dollars	Percent of wages paid in fiscal year	Maximum tax paid, dollars
1961	3.125	4800	—	—
1962	3.125	4800	3.125	150.00
1963	3.625	4800	3.375	162.00
1964	3.625	4800	3.625	174.00
1965	3.625	4800	3.625	174.00
1966	4.20	6600	3.9625	261.53
1967	4.40	6600	4.300	283.80
1968	4.40	6600	4.400	290.40

^aFor the ranks and grades with the per capita basic pay greater than the maximum, the maximum taxable wage was multiplied by the tax percentage. If the ranks or grade per capita basic pay were less than the maximum, the per capita figure was multiplied by the tax percentage.

Computation item	Officers above maximum taxable wage ^b	0-2 ^c	0-1	W
T ₆₃	162.00	142.76	102.33	1
T ₆₂	150.00	137.16	94.15	
Q ₆₂	225.802	61.159	39.245	
T ₆₃ Q ₆₂ ^c	36,580	8,731	4,016	
T ₆₂ Q ₆₂ ^c	33,871	8,389	3,695	
T ₆₄	174.00	170.88	110.31	
Q ₆₄	228.142	57.956	48.629	
T ₆₃ Q ₆₄ ^c	36,959	8,274	4,976	
T ₆₄ Q ₆₄ ^c	39,695	9,904	5,364	
T ₆₅	174.00	—	112.70	
Q ₆₅	286.748	—	48.505	
T ₆₃ Q ₆₅ ^c	45,270	—	4,964	
T ₆₅ Q ₆₅ ^c	49,893	—	5,467	
T ₆₆	190.20	—	144.59	
Q ₆₆	291,595	—	50,321	
T ₆₃ Q ₆₆ ^c	46,020	—	5,149	
T ₆₆ Q ₆₆ ^c	55,459	—	7,276	
T ₆₇	283.80	245.06	177.68	2
Q ₆₇	237,204	56,865	57,680	51
T ₆₃ Q ₆₇ ^c	38,427	8,118	5,903	8
T ₆₇ Q ₆₇ ^c	67,319	13,935	10,250	13
T ₆₈	290.40	250.05	175.60	2
Q ₆₈	247,610	58,975	72,007	73
T ₆₃ Q ₆₈ ^c	40,112	8,419	7,368	11
T ₆₈ Q ₆₈ ^c	72,186	14,466	12,644	19

^aWhen the average is above maximum taxable wage, t

^bOf the enlisted personnel, only grade E-9 was above

difference in enlisted index would have been a change in

^cThese totals are the sum of the multiplication of the

TABLE 18
Total Employer Contributions to Social Security Taxes, 1962-1968¹⁰
(T, per capita tax, in dollars; Q, number of man-years; TQ, total tax
payment, in thousands of dollars)

Officers above maximum taxable wage ^a	Total officer tax				Officer index	Total enlisted personnel tax ^b	Enlisted personnel index ^b	Total tax for officers and enlisted personnel	Combined index
	O-2 ^a	O-1	WO-2 ^a	WO-1 ^a					
162.00	142.76	102.33	161.87	139.46	—	—	—	—	—
150.00	137.16	94.15	—	130.75	—	—	—	—	—
225.802	61.159	39.245	—	1.951	328.157	—	—	—	—
36.580	8.731	4.016	—	272	49.599	—	157,397	206,995	—
33.871	8.389	3.695	—	255	46,210	93.2	146,661	192,782	93.2
174.00	170.88	110.31	—	163.05	—	—	—	—	—
228.142	57.956	48.629	—	2,548	337.275	—	—	—	—
36.959	8.274	4.976	—	355	50,564	—	159,098	209,662	—
39.695	9.904	5.364	—	415	55,378	109.5	184,392	239,770	114.4
174.00	—	112.70	—	160.41	—	—	—	—	—
286.748	—	48.505	—	2,466	337.719	—	—	—	—
45.270	—	4.964	—	344	50,578	—	158,885	209,463	—
49.893	—	5.467	—	396	55,756	110.2	194,648	250,404	119.6
190.20	—	144.59	—	—	—	—	—	—	—
291.595	—	50.321	—	—	341,916	—	—	—	—
46.020	—	5.149	—	—	51,169	—	164,367	215,536	—
55.459	—	7.276	—	—	62,735	122.6	237,580	300,315	139.3
283.80	245.06	177.68	258.43	228.03	—	—	—	—	—
237.204	56,865	57,689	5104	6,945	363,807	—	—	—	—
38.427	8,118	5,903	826	969	54,243	—	195,587	249,830	—
67.319	13,935	10,250	1319	1,584	94,407	174.0	321,597	416,004	166.5
290.40	250.05	175.60	265.54	232.14	—	—	—	—	—
247.610	58,975	72,007	7355	10,040	395,987	—	—	—	—
40,112	8,419	7,368	1190	1,400	58,489	—	207,562	266,051	—
72,186	14,466	12,644	1953	2,330	103,579	177.1	349,724	453,303	170.4

average is above maximum taxable wage, the item is placed in above-maximum category, leaving a blank in the O-2, WO-2, or WO-1 column.
enlisted personnel, only grade E-9 was above the maximum taxable wage. Had the total basic pay been multiplied by the percentage tax the
enlisted index would have been a change in the "tenths" column.

Totals are the sum of the multiplication of the per capita basic pay by the tax percentages for each grade.

B

TABLE 19
Computation of Enlisted-Subsistence Index by Service and Recapitulated for DOD Total
(P, price, in dollars; Q, number of recipients; PQ, total payment, in thousands of dollars)

Subsistence item	P ₆₃	Q ₆₂	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	Q ₆₄	P ₆₃ Q ₆₄ ^a	P ₆₄ Q ₆₄ ^a	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	P ₆₆ Q ₆₆	
Army														
Cash payments														
Separate mess	398	214,722	85,459	86,748	213,871	85,335	83,957	216,800	86,286	86,573	233,067	92,761	94,74	
Leave	399	53,251	21,247	21,513	56,462	22,585	22,159	46,357	18,450	22,512	61,530	24,489	25,01	
Not available	938	24,500	22,981	22,981	24,500	23,045	23,045	24,500	22,982	22,982	24,500	22,982	22,982	
Augmentation	230	2,500	575	575	2,500	575	595	2,500	575	593	2,500	575	593	
Mess in kind														
Aggregate	388	—	—	—	—	—	—	—	—	—	501,782	194,691	212,49	
ZI ^b	361	249,045	89,905	96,356	249,737	90,405	92,318	268,169	96,809	103,755	—	—	—	
Os ^b	416	233,701	97,220	102,361	224,429	93,587	91,998	199,698	83,074	80,908	—	—	—	
Special	416	12,000	4,992	4,993	12,000	4,992	4,919	—	—	—	—	—	—	
Operation	2.05	8,591,850	17,613	16,754	6,245,100	12,802	12,833	7,139,429	14,636	14,194	11,622,749	23,827	23,40	
Subtotal	—	—	339,992	352,281	—	333,326	331,824	—	322,812	331,517	—	359,325	379,22	
Index			103.6			99.6			102.7			105.5		
All other	—	—	—	6,852	—	—	4,676	—	—	8,783	—	—	14,87	
Total	—	—	—	359,133	—	—	336,500	—	—	340,300	—	—	394,10	
Navy														
Cash payments														
Separate mess	416	132,510	55,124	54,162	(130,533)	54,432	(50,608)	(131,153)	54,560	(51,830)	(133,236)	55,426	(53,65	
ZI	—	—	—	—	105,288	—	40,074	103,180	—	40,292	105,331	—	42,09	
Os	—	—	—	—	25,245	—	10,534	27,973	—	11,538	27,905	—	11,56	
Leave	416	35,379	14,718	14,461	28,919	12,059	11,057	—	—	—	—	—	—	
ZI	376	—	—	—	—	—	—	28,303	10,642	11,052	30,217	11,362	12,11	
Os	420	—	—	—	—	—	—	1,487	625	613	1,512	635	62	
Not available	938	18,463	17,319	17,319	16,132	15,178	15,178	17,188	16,122	16,122	16,857	15,829	15,82	
Augmentation	226	2,581	583	589	2,554	577	617	2,567	580	515	2,595	586	52	
Mess in kind														
Aggregate	431	333,768	(143,854)	(143,852)	—	—	—	—	—	—	—	—	—	
ZI	412.45	83,240	—	34,332	103,785	42,967	42,544	107,177	44,264	44,596	102,561	42,358	46,04	
Os	427	19,240	—	8,216	28,815	12,333	12,550	30,787	13,146	13,485	29,707	12,685	14,09	
Afloat	438	231,288	—	101,304	218,135	95,761	98,998	211,059	92,444	94,754	239,301	104,814	111,80	
Subtotal	—	—	231,598	230,383	—	233,307	231,552	—	232,383	232,967	—	243,695	254,69	
Index			99.5			99.3			100.0			104.5		
All other	—	—	—	7,194	—	—	6,148	—	—	6,533	—	—	5,40	
Total	—	—	—	237,532	—	—	237,700	—	—	239,500	—	—	260,10	

TABLE 19

Indexed-Subsistence Index by Service and Recapitulated for DOD Total²⁻⁸

(Dollars; Q, number of recipients, PQ, total payment, in thousands of dollars)

P ₆₄ Q ₆₄ ^a	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	P ₆₆ Q ₆₆	Q ₆₇	P ₆₃ Q ₆₇	P ₆₇ Q ₆₇	Q ₆₈	P ₆₃ Q ₆₈ ^a	P ₆₈ Q ₆₈ ^a	
Army													
83,957	216,800	86,286	86,573	233,067	92,761	94,744	302,648	120,454	136,367	325,198	129,754	154,729	
22,159	46,357	18,450	22,512	61,530	24,489	25,012	68,204	27,145	30,732	73,286	29,241	34,869	
23,045	24,500	22,982	22,982	24,500	22,982	22,982	40,000	37,522	37,522	40,000	37,625	37,625	
595	2,500	575	593	2,500	575	593	2,500	575	593	2,500	575	595	
—	—	—	—	501,782	194,691	212,493	689,193	267,407	318,051	734,981	285,908	340,203	
92,318	268,169	96,809	103,755	—	—	—	—	—	—	—	—	—	
91,998	199,698	83,074	80,908	—	—	—	—	—	—	—	—	—	
4,919	—	—	—	—	—	—	—	—	—	—	—	—	
12,833	7,139,429	14,636	14,194	11,622,749	23,827	23,405	13,469,817	27,613	31,451	19,765,319	40,519	48,152	
331,824	—	322,812	331,517	—	359,325	379,229	—	480,716	554,718	—	523,622	616,173	
46	—	102.7	—	—	105.5	—	—	115.4	—	—	—	117.7	
4,676	—	—	8,783	—	—	14,871	—	—	86,463	—	—	68,712	
356,500	—	—	340,300	—	—	394,100	—	—	641,181	—	—	684,885	
Navy													
(50,608)	(131,153)	54,560	(51,830)	(133,236)	55,426	(53,658)	146,166	60,805	65,872	146,116	61,055	69,665	
40,074	103,180	—	40,292	105,331	—	42,098	—	—	—	—	—	—	
10,534	27,973	—	11,538	27,905	—	11,560	—	—	—	—	—	—	
11,055	—	—	—	—	—	—	38,175	15,881	17,204	38,251	15,951	18,200	
—	28,303	10,642	11,052	30,217	11,362	12,115	—	—	—	—	—	—	
—	1,487	625	613	1,512	635	626	—	—	—	—	—	—	
15,178	17,188	16,122	16,122	16,857	15,829	15,829	21,646	20,304	20,304	21,682	20,395	20,395	
617	2,567	580	515	2,595	586	521	2,844	643	493	2,850	644	469	
—	—	—	—	—	—	—	—	—	—	—	—	—	
42,514	107,177	44,264	44,596	102,561	42,358	46,045	97,378	40,217	49,405	96,896	40,115	49,295	
12,550	30,787	13,146	13,485	29,707	12,685	14,096	27,801	11,871	14,511	27,833	11,913	14,567	
98,998	211,059	92,444	94,754	239,301	104,814	111,801	249,738	109,385	123,058	251,305	110,323	124,170	
231,552	—	232,383	232,967	—	243,695	254,691	—	259,106	290,847	—	260,386	296,761	
3	—	100.0	—	—	104.5	—	—	112.3	—	—	114.0	—	
6,148	—	—	6,533	—	—	5,409	—	—	5,335	—	—	5,806	
37,700	—	—	239,500	—	—	260,100	—	—	296,182	—	—	302,567	

B

TABLE 19 (continued)

Subsistence item	P ₆₃	Q ₆₂	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	Q ₆₄	P ₆₃ Q ₆₄ ^a	P ₆₄ Q ₆₄ ^a	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	(15.1)	
Marine Corps														
Cash payments														
Separate mess	387	36,153	13,991	14,379	(39,711)	15,408	(15,275)	(40,798)	15,789	(16,049)	(39,044)	15,110	3,1	
ZI	—	—	—	—	35,343	—	13,452	36,003	—	14,071	35,890	—	4,9	
Os	—	—	—	—	4,368	—	1,823	4,795	—	1,978	3,154	—	—	
Leave	383	8,850	3,390	3,505	9,128	3,505	3,474	9,129	3,496	3,565	13,214	5,061	20,9	
Not available	938	5,091	4,776	4,776	5,221	4,911	4,911	4,569	4,286	4,286	4,912	4,608	12,0	
Mess in kind													3,2	
Aggregate	389	99,872	38,850	39,001	—	—	—	—	—	—	(97,156)	37,394	59,8	
ZI	369	—	—	—	54,439	20,142	20,921	53,076	19,585	20,341	—	—	—	
Os	412	—	—	—	29,937	12,364	12,014	28,984	11,941	11,426	—	—	5	
Afloat	434	—	—	—	7,277	3,173	3,276	9,502	3,124	4,266	8,161	3,512	4,8	
Subtotal	—	—	61,007	61,661	—	59,503	59,871	—	59,221	59,933	—	65,715	61,7	
Index			101.1			100.6			101.2			101.1		
All other	—	—	—	2,939	—	—	4,829	—	—	5,569	—	—	56,66	
Total	—	—	—	64,600	—	—	64,700	—	—	65,502	—	—	7,13	
Air Force														
Cash payments													71	
Separate mess	403	427,829	172,415	172,857	394,381	159,330	156,663	(379,014)	152,743	(149,917)	(378,878)	152,688	2,51	
Leave	403	16,698	—	—	18,225	7,363	7,132	(17,732)	7,146	(7,026)	(17,211)	6,936	—	
Not available	938	—	15,663	15,663	13,851	13,086	13,086	(12,649)	11,865	(11,865)	(13,085)	12,274	—	
Emergency	1248	—	272	272	573	715	715	96	120	120	96	120	39,30	
Augmentation	164	—	1,784	1,784	10,460	1,715	2,518	14,961	2,454	2,454	14,463	2,372	29,33	
Mess in kind													2,44	
Aggregate	—	—	—	—	—	—	—	—	—	—	—	—	—	
ZI	381	—	—	—	155,814	59,365	59,309	142,177	56,074	59,629	132,944	50,652	1,96	
Os	410	—	—	—	71,552	29,336	29,331	67,261	27,577	27,987	69,322	28,422	23	
Special													103	
ZI	688	—	—	—	3,559	2,448	2,448	1,930	2,704	2,684	3,845	2,645	3,698	
Os	697	—	—	—	—	2,812	1,960	1,961	1,913	1,347	1,359	1,921	1,339	—
Operation	1,69	—	—	—	135,348	228	230	188,817	319	257	180,132	304	—	
Augmentation	36	—	—	—	8,442	305	305	8,838	319	320	9,263	315	140	
Subtotal	—	—	190,134	190,576	—	275,851	273,698	—	262,668	263,615	—	258,087	23,818	
Index			100.2			99.2			100.4			101.1		
All other	—	—	—	103,022	—	—	140	—	—	885	—	—	—	
Total	—	—	—	293,598	—	—	273,838	—	—	264,500	—	—	—	

^aLeap year; extra day of subintervace has been taken into account.

b) 21 years of iteration. On average

TABLE 19 (continued)

$P_{64}Q_{64}^a$	Q_{65}	$P_{63}Q_{65}$	$P_{65}Q_{65}$	Q_{66}	$P_{63}Q_{66}$	$P_{66}Q_{66}$	Q_{67}	$P_{63}Q_{67}$	$P_{67}Q_{67}$	Q_{68}	$P_{63}Q_{68}^a$	$P_{68}Q_{68}^a$
Marine Corps												
(15,275)	(40,798)	15,789	(16,049)	(39,044)	15,110	(15,651)	(36,071)	13,959	(16,253)	(35,484)	13,768	(16,884)
13,452	36,003	—	14,071	35,890	—	14,344	32,407	—	14,602	32,078	—	15,263
1,823	4,795	—	1,978	3,154	—	1,307	3,664	—	1,651	3,406	—	1,621
3,474	9,129	3,196	3,565	13,214	5,061	5,281	13,589	5,205	6,123	14,831	5,695	7,057
4,911	4,569	4,286	4,286	4,912	4,608	4,608	4,912	4,608	4,608	4,922	4,630	4,630
—	—	—	—	(97,156)	37,394	(41,183)	(145,195)	56,598	(69,253)	(156,179)	60,754	(74,685)
20,921	53,076	19,585	20,341	—	—	—	—	—	—	—	—	—
12,014	28,984	11,941	11,426	—	—	—	—	—	—	—	—	—
3,276	9,502	4,124	4,266	8,161	3,542	3,813	7,384	3,205	3,719	7,384	3,219	3,730
59,871	—	59,221	59,933	—	65,715	70,536	—	83,575	99,956	—	88,066	106,986
6	—	101.2	—	—	107.3	—	—	119.6	—	—	121.5	—
4,829	—	—	5,569	—	—	14,564	—	—	25,304	—	—	24,742
64,700	—	—	65,502	—	—	85,100	—	—	125,260	—	—	131,728
Air Force												
56,663	(379,014)	152,713	(149,917)	(378,878)	152,688	(151,988)	(383,033)	151,362	(172,748)	(377,142)	152,365	(179,444)
7,132	(17,732)	7,146	(7,026)	(17,211)	6,936	(6,913)	(34,364)	13,849	(15,498)	(33,861)	13,276	(16,111)
13,086	(12,649)	11,865	(11,865)	(13,085)	12,274	12,274	(25,526)	23,945	23,945	(25,503)	23,923	23,923
715	96	120	120	96	120	120	(3)	4	4	(3)	4	4
2,518	14,961	2,454	2,451	14,463	2,372	2,369	(12,241)	2,008	2,005	(10,922)	1,791	1,789
—	—	—	—	—	—	—	—	—	—	—	—	—
39,309	147,177	56,074	59,629	132,914	50,652	53,862	120,572	45,938	57,211	104,866	40,059	49,895
29,331	67,261	27,577	27,987	69,322	28,422	28,845	97,031	39,785	47,815	110,913	45,585	54,802
2,448	3,930	2,704	2,684	3,845	2,645	2,664	11,374	7,825	8,423	12,552	8,648	9,321
1,961	1,933	1,347	1,359	1,921	1,339	1,310	2,437	1,699	1,367	2,632	1,834	1,481
230	188,817	319	257	180,132	304	225	170,176	625	390	351,592	594	390
305	8,838	319	320	9,263	335	335	5,644	204	357	7,169	259	447
3,698	—	262,668	263,615	—	258,087	260,925	—	290,244	329,763	—	288,338	337,607
—	—	109.1	—	—	101.1	—	—	113.6	—	—	117.1	—
140	—	—	885	—	—	73	—	—	100	—	—	624
3,818	—	—	264,500	—	—	261,000	—	—	329,863	—	—	338,231

B

amounts for which no quantities were available; these have been omitted, and in the aggregate their prices are presumed to move as the index as a whole does. These enlisted subsistence items are emergency rations, augmentation rations in kind for missile crews, cold-weather-duty rations, combat-duty rations, rations for Vietnam civilians, survival packets, and 25-meal packets.

The annual per capita 1963 rate, the number of recipients for each year, and the current outlays together with the constant-dollar outlays computed from the price-quantity data in the table are shown together with the totals and subindexes by service in Table 19. Table 20 shows the DOD aggregate index derived from the service totals in Table 19.

TABLE 20
DOD Aggregate Index and Recapitulation of Enlisted Subsistence Pay²⁻⁸
(In thousands of dollars, derived from totals in Table 19)

Computation item	Army	Navy	Marine Corps	Air Force	Total	Aggregate index
P ₆₃ Q ₆₂	339,992	231,598	61,007	190,134	822,731	
P ₆₂ Q ₆₂	352,281	230,383	61,061	190,576	834,901	101.4
P ₆₃ Q ₆₄ ^a	333,326	233,307	59,503	273,851	901,987	
P ₆₄ Q ₆₄ ^a	331,824	231,552	59,871	273,698	896,945	99.7
P ₆₃ Q ₆₅	322,812	232,383	59,221	262,668	877,083	
P ₆₅ Q ₆₅	331,517	232,967	59,913	263,615	888,032	101.3
P ₆₄ Q ₆₆	359,325	243,695	65,715	258,087	926,822	
P ₆₆ Q ₆₆	379,229	254,691	70,536	260,927	965,381	104.2
P ₆₃ Q ₆₇	480,716	259,106	83,575	290,211	1,113,641	
P ₆₇ Q ₆₇	554,718	290,847	99,956	329,763	1,275,284	114.5
P ₆₃ Q ₆₈ ^a	523,622	260,396	88,066	288,338	1,160,422	
P ₆₈ Q ₆₈ ^a	616,173	296,761	106,986	317,607	1,357,527	117.0

^aLeap year, the extra day of subsistence was taken into account.

Permanent Change of Station. The most troublesome item was permanent change of station. First each service had different ways of showing the detail, and there were several categories in each of the major elements making up the program. These major travel elements are accession, training, and operational transfers; rotation to overseas; rotation from overseas; and separation. In each case there was travel payment for the military member and military dependents, payment for baggage and household goods, for dislocation, for trailer movement, and for handling and packaging. The Army showed only the number of military members and applied a factor applicable to the military member to take account of the other categories. The Comptroller of the Army supplied a special listing for FY64, FY65, and FY66, and for several months in FY67 of the actual number of vouchers in each category; these together with the total amounts shown on the vouchers became the basis for the Army portion of the index.⁴⁻⁷ The Army index was scaled to make the 1964 level identical with that of the combined Navy, Marine, and Air Force index. The missing Army index numbers for FY62, FY63, and FY68 are assumed to be equal to the corresponding index numbers of the index for the other services. Table 21¹²

TABLE 21
Computation of Price Index for Permanent Change of Station^{1-8 12}
(In thousands of dollars)

Computation item	Navy	Army	Air Force	Marine Corps	DOD total	Index
P ₆₃ Q ₆₂	152,409	315,759	290,176	35,547	793,891	100.0
P ₆₂ Q ₆₂	154,101	315,759	288,503	35,547	793,910	100.0
P ₆₃ Q ₆₄	135,340	321,859	324,132	42,191	823,522	99.3
P ₆₄ Q ₆₄	148,113	319,284	306,364	43,172	817,433	99.3
P ₆₃ Q ₆₅	151,631	335,406	313,388	41,341	841,766	99.0
P ₆₅ Q ₆₅	166,427	334,400	297,500	41,203	840,525	99.0
P ₆₃ Q ₆₆	152,588	196,824	112,714	41,811	403,387	102.2
P ₆₆ Q ₆₆	169,036	512,226	301,100	43,071	1,025,433	102.2
P ₆₃ Q ₆₇	181,528	591,843	419,645	85,969	1,279,035	107.4
P ₆₇ Q ₆₇	213,522	642,150	428,831	89,675	1,374,158	107.4
P ₆₃ Q ₆₈	176,431	693,117	446,471	104,903	1,420,922	107.2
P ₆₈ Q ₆₈	219,738	749,260	450,074	103,606	1,522,678	107.2

TABLE 22
Indexes for Deflation of Active-Forces Pay

Pay element	FY62	FY63	FY64	FY65	FY66	FY67	FY68 ^a
Basic pay							
Officers	100.3	100.0	111.6	118.0	126.1	131.4	130.0
Enlisted personnel	100.6	100.0	108.1	114.6	124.8	129.1	129.2
Officer incentive pay	100.1	100.0	98.2	97.5	97.6	96.9	96.9
Enlisted personnel incentive pay	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Officer special pay	99.6	100.0	100.1	108.9	109.4	110.4	110.4
Enlisted personnel special pay	100.0	100.0	100.0	100.0	104.0	106.9	107.1
Proficiency pay	100.0	100.0	111.3	119.0	119.5	119.6	119.5
Reenlistment bonus	100.6	100.0	108.1	114.6	124.8	129.1	129.2
Officer quarters allowance	95.0	100.0	127.2	127.3	126.1	124.7	131.4
Enlisted personnel quarters allowance	100.0	100.0	119.0	118.8	118.7	118.8	117.8
Officer subsistence allowance	100.0	100.0	100.3	100.0	100.0	100.0	100.0
Uniforms and clothing allowance	99.4	100.0	102.1	101.7	102.6	128.9	131.2
Family separation allowance	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Severance pay	100.0	100.0	106.0	114.5	121.8	126.9	126.5
Social security contribution	93.2	100.0	114.4	119.6	139.4	166.5	170.4
Enlisted personnel subsistence allowance	101.4	100.0	99.7	101.2	104.2	114.5	117.0
Permanent change of station expenses	100.0	100.0	99.3	99.9	102.2	107.4	107.2
Composite	100.6	100.0	108.1	112.5	118.5	123.6	124.1

^aEstimated

shows the recapitulation by service (see App A for additional detail).

There is another difficulty attributable to travel; the prices of items are computed from aggregated totals divided by the number of individuals. The FY65 indicated average price may well have been the payment for a distance traveled much different from the basis for the FY63 average price. The same might be said for the mix of the types of travel (i.e., by rail, private auto, air, or water), the age, marital status, length of service, and rank or grade of the travelers. It would seem that military transportation officials would be interested in price changes and would begin to build a data base from which better price indexes could be obtained.

For each service the per capita rate and number of individuals receiving the benefit for each category were computed. For example, the detail of the per capita rate and quantity of military members, dependents, baggage and household goods, dislocation trailer movements, and charges for handling and packaging were used to compute the indexes shown in the appendix for each service for each travel element. The current outlay and constant-dollar outlay, computed as before, became the totals from which the separate indexes for each service were derived. The aggregate permanent-change-of-station index showed, as might have been expected, relatively smaller price increases.

Summary of Active-Forces Compensation. Table 22 summarizes the developed indexes necessary to deflate the active-forces-pay elements. The obligations in current dollars to be deflated are contained in Table 4 except that there are no developed indexes for pay to cadets, station allowances overseas, other military costs, or reimbursable payments. Table 23 shows the results of this deflation process in constant 1963 dollars together with the sum of active-forces pay in current and constant dollars. The ratio of the current to the constant dollars becomes the aggregate active-forces-pay subindex. It shows that active-forces pay increased by 24.1 percent over the 7-year period.

RESERVES

The obligations for reserves are distributed for officers and enlisted persons among pay and allowance, uniform gratuities and clothing, enlisted subsistence, and travel. Pay and allowances include items for the reserves that are slightly different from those included for the active forces. They include in an aggregate number the basic pay for officers and enlisted personnel while on training duty or attending drills and for ROTC personnel while on summer encampments or cruises, a basic allowance for quarters, an officer subsistence allowance, and commutation in lieu of subsistence for ROTC contract students. Had these items been listed separately, the indexes developed for the active forces for each of these items could have been used to deflate the current reserve obligations to compute an aggregate index for reserve forces, but since this detail was not available a pay-and-allowance index for reserve forces has been developed using more aggregated active-forces indexes and weighting them by the amount of the appropriate active-forces obligations. Table 24 shows this computation. The computation of the aggregate index for reserve forces, accomplished by deflating pay and allowances by this

TABLE 23
Detail of Deflated Obligations, Aggregate of Current Obligations,
and Index of Active-Forces Pay and Allowances

(In millions of constant 1963 dollars)

Obligations	FY62	FY63	FY64	FY65	FY66	FY67	FY68 ^a
Pay							
Basic pay							
Officers	1,983	1,983	2,007	2,041	2,039	2,166	2,321
Enlisted personnel	4,768	4,766	4,731	4,647	4,877	5,800	6,156
Incentive							
Officers	261	263	268	270	272	275	289
Enlisted personnel	77	82	89	95	106	112	118
Social							
Officers	33	33	40	39	55	73	81
Enlisted personnel	134	135	92	97	258	419	488
Proficiency							
Officers	—	109	101	103	104	112	124
Reenlistment							
Officers	117	125	128	132	164	202	
Allowances							
Quarters							
Officers	288	276	234	238	243	271	277
Enlisted personnel	1,054	1,064	959	921	919	1,093	1,093
Officer subsistence	191	192	192	195	196	209	228
Uniforms and clothing	252	228	245	225	315	296	310
Family separation	53	—	37	50	88	177	189
Severance	192	207	216	215	219	226	271
Social security contribution	214	210	212	210	220	252	266
Other programs							
Enlisted subsistence	958	920	909	887	971	1,216	1,245
Permanent change of station	775	825	830	841	1,157	1,293	1,422
Total in constant 1963 dollars	11,446	11,350	11,287	11,202	12,171	14,964	15,080
Total in current dollars (derived from Table 4 ^b)	11,451	11,350	12,205	12,608	14,420	17,387	18,721
Aggregate index	100.0	100.0	108.1	112.5	118.5	123.6	124.1

^aEstimated.

^bAdjusted to exclude cadets, station allowances overseas, other military costs, and reimbursable payments.

TABLE 24
Computation of Pay-and-Allowance Index for Reserve Forces²⁻⁶
 (Includes Army, Navy, Marine Corps, Air Force, Army National Guard,
 and Air National Guard)

Item	1962	1963	1964	1965	1966	1967	1968
Pay and Allowances in Millions of Dollars							
Basic pay, officers and enlisted personnel	6,786	6,689	7,354	7,733	8,660	10,334	10,961
Quarters							
Officers	274	276	298	303	306	338	364
Enlisted personnel	1,054	1,064	1,141	1,093	1,091	1,191	1,298
Officer subsistence	191	192	192	195	196	209	228
Social security	199	210	243	251	307	419	454
Total	8,594	8,431	9,228	9,576	10,560	12,491	13,303
Indexes							
Basic pay, officers and enlisted personnel	100.5	100.0	109.2	115.7	125.2	129.7	129.4
Quarters							
Officers	95.0	100.0	127.2	127.5	126.1	124.7	131.4
Enlisted personnel	100.0	100.0	119.0	118.8	118.7	118.8	118.8
Officer subsistence	100.0	100.0	100.0	106.0	100.0	100.0	100.0
Social security	93.2	100.0	114.4	119.6	139.3	166.5	170.4
Pay and Allowances in Millions of Constant 1963 Dollars							
Basic pay	6,752	6,689	7,334	6,684	6,917	7,968	8,471
Quarters							
Officers	288	276	234	238	243	271	277
Enlisted personnel	1,054	1,064	959	921	919	1,003	1,093
Officer subsistence	191	192	192	195	196	209	228
Social security	214	210	212	210	220	252	266
Total	8,499	8,431	8,331	8,248	8,495	9,703	10,335
Index							
Pay and allowances for reserves	100.1	100.0	110.8	116.1	124.3	128.7	128.7

TABLE 25
Computation of Index of Obligations of Total Reserve Program

Item	1962	1963	1964	1965	1966	1967	1968
Reserve Programs in Thousands of Dollars							
Reserve pay and allowances ^a	511,223	508,350	581,499	658,600	673,446	813,254	783,147
Uniforms and clothing	34,762	35,109	40,746	33,691	36,855	57,062	46,564
Enlisted subsistence	28,369	29,774	38,012	37,928	42,006	65,004	61,470
Travel	36,165	38,167	44,785	42,521	41,680	50,173	46,830
Total	610,819	611,400	705,042	712,740	793,987	985,493	938,011
Indexes							
Pay and allowances	100.1	100.0	110.8	116.1	124.3	126.7	128.7
Uniforms and clothing	99.4	100.0	102.1	101.5	102.6	128.9	131.2
Enlisted subsistence	101.4	100.	99.7	101.2	104.2	114.5	117.0
Travel	100.0	100.0	99.3	99.9	102.2	107.4	107.2
Reserve Programs in Thousands of Constant 1963 Dollars							
Pay and allowances	510,712	508,350	524,319	567,270	541,791	631,899	608,506
Uniforms and clothing	34,771	35,109	39,908	33,193	35,921	44,268	30,796
Enlisted subsistence	28,470	29,774	38,126	37,478	40,313	50,772	52,538
Travel	36,165	38,167	45,101	42,564	40,783	46,716	43,685
Total	610,118	611,400	647,954	680,505	658,808	779,655	735,525
Composite Index							
	100.1	100.0	108.8	113.6	120.5	126.8	127.5

^aIncludes administration costs, a major portion being pay and allowances, and for 1966, 1967, and 1968 this item includes uniforms and clothing, subsistence, and travel for the Army; no detail was available.

newly developed index and deflating uniform gratuities and clothing, enlisted subsistence, and travel by their appropriate active-forces indexes, is included in Table 25. The only difference in the subindexes for the active and reserve forces are therefore attributable to the differences in mixes of the foregoing components, not to any difference in detailed prices.

RETIREMENT PAY

The third subindex in the military-personnel category is for retired persons. The same approach was used as for the basic-pay index. Monthly pay rates and total-outlay data were obtained for each retired military rank for

TABLE 26
Per Capita Monthly Pay and Price Relatives for DOD Retired
Military Personnel by Rank²⁻⁶

Rank	Per capita monthly pay, dollars					Price relatives, 1963-100			
	FY62	FY63	FY64	FY65	FY66	1962	1964	1965	1966
Officers									
O-10	1027	1063	1256	1248	1301	97	118	117	123
O-9	926	946	1093	1088	1130	98	116	115	119
O-8	791	805	913	913	936	98	113	113	116
O-7	669	675	762	761	778	99	113	113	115
O-6	502	502	553	554	581	100	110	110	116
O-5	377	376	411	416	441	100	109	111	117
O-4	324	324	349	353	100	100	108	109	115
O-3	268	265	282	282	295	101	106	106	111
O-2	206	206	216	217	227	100	105	105	110
O-1	179	178	185	185	193	101	104	104	108
W-4	358	355	371	367	396	101	105	103	112
W-3	271	266	282	276	295	102	106	104	111
W-2	239	236	249	250	260	101	106	106	110
W-1	202	202	212	220	221	100	105	109	109
Enlisted personnel									
E-9	242	234	261	266	284	103	112	114	121
E-8	202	197	216	221	236	102	110	112	120
E-7	187	184	193	194	204	102	105	105	111
E-6	150	150	159	160	171	100	106	107	114
E-5	127	127	134	135	143	100	106	106	113
E-4	98	98	103	102	107	100	105	104	109
E-3	66	66	71	72	73	100	108	109	111
E-2	54	52	57	57	54	104	110	110	104
E-1	57	60	56	57	55	95	93	95	92

Rank	P ₆₃ Q ₆₃	P ₆₆	Price Index C
Officers			
O-10	84		
O-9	212		
O-8	1,020		
O-7	965		
O-6	11,791	10	
O-5	12,318	10	
O-4	10,642	9	
O-3	6,568	6	
O-2	3,130	3	
O-1	994		
WO-4	1,344	1	
WO-3	1,469	1	
WO-2	2,842	2	
WO-1	695		
Enlisted personnel			
E-9	653		
E-8	1,572		
E-7	22,019	19	
E-6	6,276	4	
E-5	3,055	2	
E-4	994		
E-3	389		
E-2	152	1	
E-1	36		
Total	89,160	77,	
Index (1963-100)			

TABLE 27
Price Index Computation for DOD Retired Military Personnel by Rank
(In thousands of dollars)

	Rank	P ₆₃ Q ₆₃	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	P ₆₃ Q ₆₆	P ₆₆ Q ₆₆
100										
1966	Officers									
	O-10	84	78	75	92	108	108	126	108	133
123	O-9	212	204	199	222	258	227	261	242	289
119	O-8	1,020	972	955	1,055	1,192	1,095	1,237	1,133	1,317
116	O-7	965	955	946	985	1,113	994	1,123	1,048	1,209
115	O-6	11,791	10,870	10,870	12,835	14,119	13,876	15,264	14,975	17,321
115	O-5	12,318	10,032	10,052	14,496	15,801	16,858	18,712	19,105	22,425
116	O-4	10,642	9,070	9,070	12,366	13,355	13,888	15,138	14,916	17,064
117	O-3	6,568	6,375	6,452	6,742	7,147	6,819	7,228	6,832	7,605
115	O-2	3,130	3,141	3,141	3,136	3,293	3,154	3,312	3,139	3,462
111	O-1	994	999	1,005	986	1,025	974	1,013	970	1,050
110	WO-4	1,344	1,190	1,200	1,483	1,557	1,641	1,690	1,828	2,041
108	WO-3	1,409	1,136	1,158	1,613	1,710	1,791	1,863	1,959	2,177
112	WO-2	2,842	2,739	2,775	2,907	3,081	2,953	3,130	2,981	3,284
111	WO-1	695	680	680	725	761	755	823	793	867
110	Enlisted personnel									
109	E-9	653	344	356	980	1,108	1,331	1,517	1,689	2,050
121	E-8	1,572	915	938	2,290	2,519	3,021	3,383	3,592	4,424
120	E-7	22,019	19,596	19,929	24,095	25,300	25,674	26,958	26,875	29,787
111	E-6	6,276	4,638	4,638	8,914	8,495	9,809	10,496	11,494	13,081
114	E-5	3,055	2,205	2,205	3,975	4,213	4,904	5,198	5,797	6,548
113	E-4	994	864	864	1,132	1,189	1,287	1,338	1,421	1,554
109	E-3	389	366	366	411	444	418	456	444	492
111	E-2	152	148	153	154	169	152	167	158	163
104	E-1	36	33	31	39	36	38	36	36	33
92	Total	89,160	77,550	78,056	100,742	107,993	111,767	120,469	121,635	138,376
	Index (1963 = 100)		100.7		107.2		107.8		113.8	

B

TABLE 28

Obligation to DOD Retired Military Personnel, Regular and Nonregular, by Type of Re-
(P, per capita price, in dollars; Q, number of man-years; PQ, total price, in thousands of dollars)

Obligation	P ₆₃	Q ₆₂	P ₆₃ Q ₆₂	P ₆₂ Q ₆₂	Q ₆₄	P ₆₃ Q ₆₄	P ₆₄ Q ₆₄	Q ₆₅	P ₆₃ Q ₆₅	P ₆₅ Q ₆₅	Q ₆₆	P ₆₃ Q ₆₆	P ₆₆ Q ₆₆	
Nondisability														
Regular officers	4911	40,432	198,562	196,732	48,582	238,586	255,080	53,713	263,785	290,256	57,863	284,165	328,800	
Regular enlisted personnel	2082	82,812	172,415	176,508	123,392	256,902	264,461	148,359	308,883	320,139	170,945	355,907	385,559	
Nonregular officers	3694	47,887	176,895	175,179	67,363	248,974	266,059	77,123	285,047	313,891	85,631	316,492	368,388	
Nonregular enlisted personnel	1244	1,377	1,713	1,701	1,853	2,305	2,388	1,155	2,681	2,796	2,396	2,931	3,149	
Subtotal			549,585	550,140		746,767	787,988		860,396	927,082		959,945	1,086,125	
Temporary disability														
Regular officers	5530	1,807	9,993	9,759	1,890	10,452	11,049	1,805	9,982	10,969	1,518	8,395	9,253	
Regular enlisted personnel	1664	10,902	18,141	17,549	10,685	17,780	18,225	10,241	17,041	18,041	9,422	15,678	17,245	
Nonregular officers	4090	1,738	7,108	6,984	1,273	5,297	5,525	1,045	4,274	4,790	865	3,538	4,123	
Nonregular enlisted personnel	1213	888	1,077	960	777	943	1,024	683	828	949	652	791	944	
Subtotal			36,319	35,252		34,382	35,823		32,125	31,719		28,402	32,033	
Permanent disability														
Regular officers	4632	12,719	58,914	58,881	13,367	60,916	67,024	13,692	63,421	70,856	14,320	66,330	78,721	
Regular enlisted personnel	1611	21,131	34,042	33,245	28,225	45,407	47,393	31,712	51,088	54,854	36,134	58,212	66,411	
Nonregular officers	3020	37,960	114,639	114,242	38,896	117,466	123,872	39,384	118,940	128,937	39,945	120,634	138,900	
Nonregular enlisted personnel	916	2,139	2,866	1,967	2,352	2,147	2,241	2,409	2,199	2,321	2,458	2,244	2,199	
Subtotal			210,461	208,335		226,936	240,530		235,648	236,968		247,420	285,155	
Fleet reserve	2015	48,601	97,931	98,632	68,266	137,556	142,279	75,734	152,604	161,683	81,521	164,265	181,154	
Survivors benefits	1149	3,043	3,496	3,495	3,932	4,519	4,595	4,408	5,065	5,295	4,896	5,626	6,454	
Total			897,792	895,854		1,150,160	1,211,215		1,264,838	1,385,777		1,405,208	1,592,113	
Index			99.8			105.3			107.8			113.3		

A

TABLE 28

Military Personnel, Regular and Nonregular, by Type of Retirement²⁻⁸

(dollars; Q, number of man-years; PQ, total price, in thousands of dollars)

	Q_{65}	$P_{63}Q_{65}$	$P_{65}Q_{65}$	Q_{66}	$P_{63}Q_{66}$	$P_{66}Q_{66}$	Q_{67}	$P_{63}Q_{67}$	$P_{67}Q_{67}$	Q_{68}	$P_{63}Q_{68}$	$P_{68}Q_{68}$
30	53,713	263,785	290,256	57,863	284,165	328,796	62,891	308,856	372,805	68,610	336,944	411,827
61	148,359	308,883	320,139	170,945	355,907	385,675	196,935	410,019	459,554	223,516	465,360	527,909
59	77,123	285,047	313,891	85,631	316,492	368,824	93,866	346,929	417,194	103,329	381,904	465,956
38	2,155	2,681	2,796	2,396	2,931	3,233	2,650	3,297	3,539	2,929	3,644	3,894
38		860,396	927,082		959,945	1,086,528		1,069,103	1,253,092		1,187,852	1,412,586
49	1,805	9,982	10,969	1,518	8,395	9,750	1,294	7,156	8,621	1,224	6,769	8,457
25	10,241	17,041	18,041	9,422	15,678	17,414	9,002	14,979	18,071	9,008	14,989	18,942
25	1,045	4,271	4,790	865	3,538	4,168	846	3,460	4,321	944	3,861	4,935
24	683	828	949	652	791	920	770	934	1,060	1,044	1,266	1,349
23		32,125	34,749		28,402	32,252		26,529	32,073		26,885	33,683
34	13,692	63,421	70,856	14,320	66,330	78,154	15,150	70,175	86,339	16,002	74,121	92,471
33	31,712	51,088	54,854	36,134	58,212	66,580	42,135	67,879	81,818	48,448	78,050	94,794
72	39,384	118,940	128,937	39,945	120,634	138,348	40,677	122,845	146,726	41,085	125,889	151,313
31	2,409	2,199	2,321	2,458	2,244	2,536	2,640	2,410	2,769	2,937	2,681	3,069
30		235,648	256,969		247,420	285,618		263,309	317,652		280,741	341,647
9	75,734	152,604	161,683	81,521	164,265	181,908	88,237	177,798	204,285	95,842	193,122	224,245
5	4,408	5,065	5,295	4,896	5,626	6,046	5,455	6,268	6,898	6,128	7,041	7,839
15		1,285,838	1,385,777		1,405,208	1,592,352		1,543,007	1,814,000		1,695,641	2,020,000
		107.8			113.3			117.6			119.1	

B

the years FY62 to FY66 from the congressional hearings on appropriations.²⁻⁶ The rate for FY63 for each rank was compared with the rate for that rank in the other years to produce a price relative. Dividing the current-outlay figure by the price relative produces the constant FY63 dollar value, the sum of these constant FY63 dollar values was compared with the total outlay in current-dollar terms to produce the retired-pay index. For FY67 and FY68, estimates were available only for the number of individuals and the amount paid to regular Army, Navy, Marine Corps, and Air Force officers and enlisted persons and to nonregular (reserve) personnel in the following retirement categories: nondisability, temporary disability, and permanent disability. In addition there were fleet-reserve retirement and survivor-benefits estimates.

An index for these data was also computed. Table 26 shows the computation of the price relatives used in the computation of the aggregate retired-pay index shown in Table 27. This produces a given-year weighted index of retired pay by rank for FY62 to FY66, and Table 28 computes the retirement-pay index by regular and nonregular members and by type of retirement. The two computations give somewhat similar results; therefore the FY67 and FY68 index by type of retirement was linked to the index computed by rank to extend the index series for retired pay through FY68.

In both computations of the retired-pay index the average rates by rank or by type of retirement are subject to variations resulting from the changing mix of individuals, types of retirement, and the pay classifications included in them.

MILITARY-PERSONNEL SUMMARY

There are now three large subindexes to be aggregated into a single given-year weighted index of military personnel; they are compensation for the

TABLE 29
Aggregate Military-Personnel
Price Index
(1963 = 100)

Year	Index
1962	100.1
1963	100.0
1964	108.1
1965	112.1
1966	118.1
1967	123.2
1968	123.8

(a) active forces, (b) reserve forces, and (c) retired persons. Table 29 provides the aggregate index for military personnel. It summarizes the findings from Table 30, which recapitulates the total obligations and the developed indexes and indicates the constant FY63 dollars necessary to compute the aggregate index. The ratio between the total amount in current dollars and FY63 dollars is the aggregate price index for military personnel.

TABLE 30
Aggregate Index of Obligations for DOD Military Personnel, Active, Reserve, and Retired

Category	1962	1963	1964	1965	1966	1967	1968 ^a
Obligations in Millions of Current Dollars							
Active forces	11,800	11,683	12,528	12,849	14,657	17,828	19,253
Reserve forces	611	614	705	772	793	985	938
Retired	896	1,015	1,211	1,386	1,592	1,814	2,020
Total	13,307	13,309	14,144	15,007	17,012	20,627	22,211
Index							
Active forces	100.0	100.0	108.1	112.5	118.5	123.6	124.2
Reserve forces	100.1	100.0	108.8	13.6	120.5	126.8	127.5
Retired	100.7	100.0	107.2	107.8	113.8	117.6	119.1
Obligations in Millions of 1963 Dollars							
Active forces	11,800	11,683	11,589	11,421	12,369	14,424	15,514
Reserve forces	610	611	648	680	658	777	736
Retired	890	1,015	1,130	1,286	1,399	1,543	1,696
Total	13,300	13,309	13,367	13,387	14,426	16,744	17,946
Aggregate Index							
	100.1	100.0	108.1	111.1	118.1	123.2	123.8

^aEstimated.

REVISED VERSION OF MILITARY-GOODS-AND-SERVICES INDEX

Table 31 is the computation of a new price index of military goods and services; it uses the same indexes for deflating the current-dollar figures as appeared in RAC-TP-289 except that the new Military Personnel Price Index¹³ has been substituted for the one originally used. No other attempt has been made to improve the indexes for the other budget categories of RAC-TP-289.

TABLE 31
Aggregate Price Index for DOD Expenditures, Based on New Military-Personnel Price Index¹³

Item	1962	1963	1964	1965	1966	1967 ^a	1968 ^b
Obligations in Millions of Current Dollars							
Military personnel	13,032	13,000	14,195	14,771	16,753	19,787	21,823
Procurement	14,507	16,603	15,321	11,815	14,319	18,991	21,605
O&M ^c	7,182	7,549	7,607	7,665	9,598	13,442	12,973
Civilian personnel	6,642	6,800	6,872	7,320	7,950	8,510	9,035
RDTE ^c	5,869	5,860	6,457	5,618	5,797	6,453	6,483
Military construction, etc ^c	1,144	1,465	1,386	1,354	1,686	1,814	1,891
Military assistance ^c	1,368	1,704	1,481	1,229	968	873	800
Subtotal	49,744	52,980	53,319	49,771	56,871	69,870	74,610
Revolving funds^d	-1,536	-3,004	-2,074	-2,369	-1,494	-1,334	-1,510
Total	48,205	49,976	51,245	47,402	55,377	68,537	73,100
Price Indexes, 1963 = 100							
Military personnel	100.1	100.0	108.1	112.1	118.1	124.2	124.8
Procurement	100.1	100.0	101.9	104.1	106.2	108.1	—
O&M	99.6	100.0	99.7	101.4	103.7	105.4	—
Civilian personnel	95.2	100.0	103.4	108.6	110.9	113.0	114.1
RDTE	97.1	100.0	101.9	105.0	108.4	110.8	—
Military construction, etc	97.1	100.0	102.7	105.9	108.8	112.6	—
Military assistance	98.9	100.0	101.3	102.9	105.3	107.3	—

TABLE 31 (continued)

Item	1962	1963	1964	1965	1966	1967 ^a	1968 ^b
Obligations in Millions of Constant 1963 Dollars							
Military personnel	13,019	13,000	13,131	13,177	13,183	16,061	17,628
Procurement	14,493	16,603	15,035	11,460	13,483	17,536	—
O&M	7,211	7,349	7,630	7,559	9,256	12,753	—
Civilian personnel	6,997	6,800	6,646	6,778	7,169	7,491	7,918
RDTE	6,044	5,860	6,337	5,530	5,163	5,824	—
Military construction, etc.	1,178	1,465	1,350	1,278	1,550	1,611	—
Military assistance	1,383	1,703	1,462	1,194	920	814	—
Total	50,325	52,980	51,591	46,796	51,724	62,090	—
Aggregate index using improved military-personnel price index	98.8	100.0	103.3	106.4	110.0	112.5	—
RAC-EP-289 aggregate index	98.9	100.0	102.9	105.7	109.8	112.1	—

^aRevised from Monthly Report of Status of Funds by Functional Title.¹³^bEstimated.^cAdjusted for civilian personnel.^dThis category serves as an accounting adjustment. The funds are used for financing the acquisition of inventories of materials and supplies for resale and mobilization. When the resale income is larger than the expenditure in the category, this item is negative; when stocks are being accumulated and expenditures are larger than sales, the amount of this category is positive.

Appendix A

RECAPITULATION OF OBLIGATIONS FOR PERMANENT CHANGE OF STATION FOR VARIOUS BRANCHES OF SERVICE

Tables

A1-A4. Recapitulation of Travel by Officers and Enlisted Personnel for Permanent Change of Station:

A1. Navy	44
A2. Army	45
A3. Air Force	46
A4. Marine Corps	47

TABLE A1
Recapitulation of Travel by Officers and Enlisted Personnel
for Permanent Change of Station: Navy
(In thousands of dollars)

Computation item	Type of travel						Total	Index
	Accession	Training	Operational	Rotation	Separation	Organized units		
P ₆₃ Q ₆₂	32,279	25,227	37,396	39,175	22,780	5552	152,409	101.1
P ₆₂ Q ₆₂	2,390	26,044	38,136	39,181	22,796	5554	154,101	
P ₆₃ Q ₆₄	18,388	22,845	30,889	34,962	22,961	5295	135,340	
P ₆₄ Q ₆₄	21,050	22,262	36,845	40,366	23,240	4350	148,113	109.4
P ₆₃ Q ₆₅	20,665	24,644	33,736	38,837	26,415	7334	151,631	109.8
P ₆₃ Q ₆₅	24,673	24,026	42,265	40,583	25,833	9047	166,427	
P ₆₃ Q ₆₆	21,362	23,113	33,079	42,650	27,276	7163	152,586	111.2
P ₆₆ Q ₆₆	25,765	22,886	41,780	43,083	26,983	9139	169,636	
P ₆₂ Q ₆₇	21,691	26,514	39,016	59,610	27,966	6779	181,578	
P ₆₇ Q ₆₇	29,073	25,266	52,765	70,338	29,026	7054	213,522	117.6
P ₆₃ Q ₆₈	20,700	21,697	41,194	73,464	15,459	3917	176,431	
P ₆₈ Q ₆₈	25,518	20,878	54,918	84,736	29,682	4006	219,738	124.5

TABLE A2
Recapitulation of Travel by Officers and Enlisted Personnel
for Permanent Change of Station: Army

a. Travel Obligations, 1964-1967
(In thousands of dollars; 1964 = 100)

Type of travel	P ₆₄ Q ₆₅	P ₆₅ Q ₆₅	P ₆₄ Q ₆₆	P ₆₆ Q ₆₆	P ₆₄ Q ₆₇	P ₆₇ Q ₆₇
Accession	24,406	24,394	49,226	53,426	17,326	19,466
Training	7,618	8,021	6,402	6,553	3,028	3,032
Rotational						
To overseas	52,453	54,672	59,612	61,588	27,909	31,859
From overseas	67,683	65,276	91,920	88,792	43,494	43,137
Separation	32,181	34,492	29,977	31,28	8,549	11,463
Operational	22,094	22,536	24,777	26,011	9,248	10,899
Total Army travel	208,435	209,391	261,914	272,098	109,554	119,856
Index	100.5		103.9		109.4	

b. Army Index Linked to Combined Navy, Air Force, and Marine Corps Index

Year	Initial Army index	Combined	
		Navy, Marine Corps, and Air Force index	Final Army index
1962	—	106.0	100.0
1963	—	100.0	100.0
1964	100.0	99.2	99.2
1965	100.5	100.0	99.7
1966	103.9	102.1	103.1
1967	109.4	106.7	108.5
1968	—	106.3	108.1

c. Total Army Obligations for Permanent Change of Station in Current
and Constant Dollars

(In thousands of dollars, derived from totals in Table 21)

Year	Constant 1963 dollars	Current dollars
1962	315,759	315,759
1963	352,957	352,975
1964	321,859	319,284
1965	335,406	334,400
1966	496,821	512,226
1967	591,843	642,150
1968	693,117	749,260

TABLE A3
Recapitulation of Travel by Officers and Enlisted Personnel
 for Permanent Change of Station: Air Force*
 (In thousands of dollars)

Computation item	Type of travel					Total	Index
	Accession	Training	Operational	Force structure	Rotation		
P ₆₃ Q ₆₂	12,351	27,143	22,620	17,586	172,586	23,812	14,068
P ₆₂ Q ₆₂	12,570	26,310	22,558	17,256	173,762	23,818	12,229
P ₆₃ Q ₆₄	9,356	17,464	15,655	24,624	223,379	28,930	4,724
P ₆₄ Q ₆₄	9,806	19,059	16,405	24,649	201,002	29,951	5,992
P ₆₃ Q ₆₅	8,702	17,144	16,829	28,687	205,956	32,909	3,761
P ₆₅ Q ₆₅	9,033	18,521	17,017	27,910	187,992	33,547	3,480
P ₆₃ Q ₆₆	9,165	16,741	,978	29,854	207,736	30,464	2,226
P ₆₆ Q ₆₆	9,538	18,254	16,199	28,550	193,696	30,829	3,644
P ₆₃ Q ₆₇	14,738	19,140	19,347	23,070	322,397	14,433	6,520
P ₆₇ Q ₆₇	15,743	21,993	22,737	25,755	317,532	16,304	4,19,645
P ₆₃ Q ₆₈	12,761	17,572	19,047	24,657	339,403	30,076	8,767
P ₆₈ Q ₆₈	13,652	20,680	22,407	27,583	329,738	32,079	-,855
						3,935	450,074
							100.8

TABLE A4
 Recapitulation of Travel by Officers and Enlisted Personnel
 for Permanent Change of Station: Marine Corps
 (In thousands of dollars)

Computation item	Type of travel					Total	Index
	Accession	Training	Operational	Rotation	Separation		
P ₆₃ Q ₆₄	5,986	1464	4851	22,998	6,892	42,191	102.3
P ₆₄ Q ₆₄	6,109	1186	4915	23,719	6,913	43,172	
P ₆₃ Q ₆₅	5,607	1730	4990	23,549	5,465	41,341	102.1
P ₆₅ Q ₆₅	5,811	1749	5382	23,840	5,421	42,203	
P ₆₃ Q ₆₆	5,948	1805	5384	23,034	5,640	41,811	103.0
P ₆₆ Q ₆₆	6,191	1850	5948	23,487	5,595	43,071	
P ₆₃ Q ₆₇	10,138	1301	4199	62,900	7,131	85,969	104.3
P ₆₇ Q ₆₇	9,857	1524	5664	65,062	7,548	89,655	
P ₆₃ Q ₆₈	13,007	1877	4344	75,073	10,600	104,903	98.8
P ₆₈ Q ₆₈	13,141	2172	5410	71,710	11,173	103,606	

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12. ABSTRACT The RAC publication, "Military Price Index: a Preliminary Presentation," RAC-TP-289, was an attempt to produce in some detail a price index that would be useful for deflating to constant dollars the purchases of goods and services by the Department of Defense (DOD). As the aggregate index was being developed, it became apparent that the assumption of the adequacy of certain specific wholesale and consumer price indexes as deflators of given military expenditures must be tested; this did not mean that the developmental work of the index was useless; it merely meant that the index might be improved or that more confidence could be placed in it if the data samples were from military rather than civilian sources. This supplement of a price index for military personnel is the first step in an overall improvement, and to that extent it tested the adequacy of using borrowed civilian-type indexes in the military-personnel context. The index developed for the price changes in the "Military-personnel budget" category showed an increase about 12 percent faster than the military-personnel subindex computed for RAC-TP-289. From 1962 to 1967 the price increase shown was 23.2 percent compared with the 20.8 percent increase given in RAC-TP-289. When the new Military Personnel Index was used to deflate military-personnel expenditures, the change in the aggregate military price index was less significant even though military personnel make up approximately 30 percent of the DOD budget.		

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